Using NHSN for MRSA Bacteremia and *C. difficile* LabID Event Reporting

Angela M Anttila, PhD, MSN, NP-C, CIC

Happy Day

Thursday, June 6, 2013

Welcome New IP - Suzie Mus

Incredible as it may seem, Happy Day Hospital finally hires an Infection Preventionist after 10 long months of vacancy. Suzie Mustbcrazy is brand new to the infection prevention field. Don't let this fool you though, she brings 10 years of hospital oncology experience. We are excited to have Mrs. Mustbcrazy and welcome her as the sole IP to our 400 bed hospital! Her first task will be to get our hospital caught up on CMS reporting requirements for MRSA Bacteremia and C. difficile LabID Event reporting!! She will receive top-notch IP training via webcast from this years APIC conference. Of course, her follow-up training will come directly from the CDC/NHSN help-desk and training website (as soon as we find the website).

Ren
foll
imp

The
that
rela
the
beh
of a
exp
in li
its
beh
con

First Day on the Job

HELP! Where do I get started?

PRIORITIZE!

Online Resources – NHSN Protocols

http://www.cdc.gov/nhsn/acute-care-hospital/cdiff-mrsa/index.html

- **Multidrug-Resistant Organism & *Clostridium difficile* Infection (MDRO and CDI) Module**
- **"One Stop Shopping"**
  - On-Demand trainings
  - NHSN protocols
  - Data collection forms & instructions
  - CDC location descriptions and guidance
  - CMS-related documents
  - Analysis guides
  - Frequently Asked Questions

Why is surveillance for MRSA bacteremia and *C. difficile* important?

- *C. difficile* infections contribute to approximately 14,000 deaths/year
  - ≈ 90% elderly
- Antibiotic use and healthcare exposure are two of the greatest risk factors
- Despite a slight decrease in the percentage of *S. aureus* resistant to oxacillin (MRSA), statistics indicate that MRSA continues to dominate among pathogens responsible for HAIs


Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Early Release / Vol. 61
March 6, 2012

Vital Signs: Preventing *Clostridium difficile* Infections

Abstract

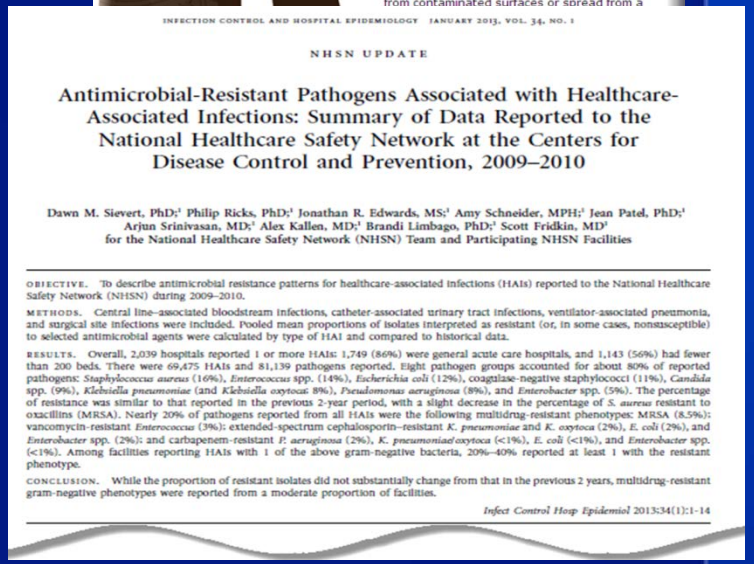
Background: *Clostridium difficile* infection (CDI) is a common and sometimes fatal health-care–associated infection; the incidence, deaths, and excess health-care costs resulting from CDIs in hospitalized patients are all at historic highs. Meanwhile,

Making Health Care Safer
Stopping *C. difficile* Infections
Vitalsigns
March 2012

3X
94%
20%

On this Page
- Introduction
- Problem
- Who's at Risk?
- What Can Be Done
- Science Behind this Issue
- Related Links
- Social Media
- Read Associated MMWR

People getting medical care can catch serious infections called health care-associated infections (HAIs). While most types of HAIs are declining, one – caused by the germ *C. difficile* – remains at historically high levels. *C. difficile* causes diarrhea linked to 14,000 American deaths each year. Those most at risk are people, especially older adults, who take antibiotics and also get medical care. When a person takes antibiotics, good germs that protect against infection are destroyed for several months. During this time, patients can get sick from *C. difficile* picked up from contaminated surfaces or spread from a


INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY JANUARY 2013, VOL. 34, NO. 1

NHSN UPDATE

Antimicrobial-Resistant Pathogens Associated with Healthcare-Associated Infections: Summary of Data Reported to the National Healthcare Safety Network at the Centers for Disease Control and Prevention, 2009–2010

Dawn M. Sievert, PhD;[1] Philip Ricks, PhD;[1] Jonathan R. Edwards, MS;[1] Amy Schneider, MPH;[1] Jean Patel, PhD;[1] Arjun Srinivasan, MD;[1] Alex Kallen, MD;[1] Brandi Limbago, PhD;[1] Scott Fridkin, MD[1] for the National Healthcare Safety Network (NHSN) Team and Participating NHSN Facilities

OBJECTIVE. To describe antimicrobial resistance patterns for healthcare-associated infections (HAIs) reported to the National Healthcare Safety Network (NHSN) during 2009–2010.

METHODS. Central line–associated bloodstream infections, catheter-associated urinary tract infections, ventilator-associated pneumonia, and surgical site infections were included. Pooled mean proportions of isolates interpreted as resistant (or, in some cases, nonsusceptible) to selected antimicrobial agents were calculated by type of HAI and compared to historical data.

RESULTS. Overall, 2,039 hospitals reported 1 or more HAIs: 1,749 (86%) were general acute care hospitals, and 1,143 (56%) had fewer than 200 beds. There were 69,475 HAIs and 81,139 pathogens reported. Eight pathogen groups accounted for about 80% of reported pathogens: *Staphylococcus aureus* (16%), *Enterococcus* spp. (14%), *Escherichia coli* (12%), coagulase-negative staphylococci (11%), *Candida* spp. (9%), *Klebsiella pneumoniae* (and *Klebsiella oxytoca*; 8%), *Pseudomonas aeruginosa* (8%), and *Enterobacter* spp. (5%). The percentage of resistance was similar to that reported in the previous 2-year period, with a slight decrease in the percentage of *S. aureus* resistant to oxacillins (MRSA). Nearly 20% of pathogens reported from all HAIs were the following multidrug-resistant phenotypes: MRSA (8.5%); vancomycin-resistant *Enterococcus* (3%); extended-spectrum cephalosporin–resistant *K. pneumoniae* and *K. oxytoca* (2%), *E. coli* (2%), and *Enterobacter* spp. (2%); and carbapenem-resistant *P. aeruginosa* (2%), *K. pneumoniae*/*oxytoca* (<1%), *E. coli* (<1%), and *Enterobacter* spp. (<1%). Among facilities reporting HAIs with 1 of the above gram-negative bacteria, 20%–40% reported at least 1 with the resistant phenotype.

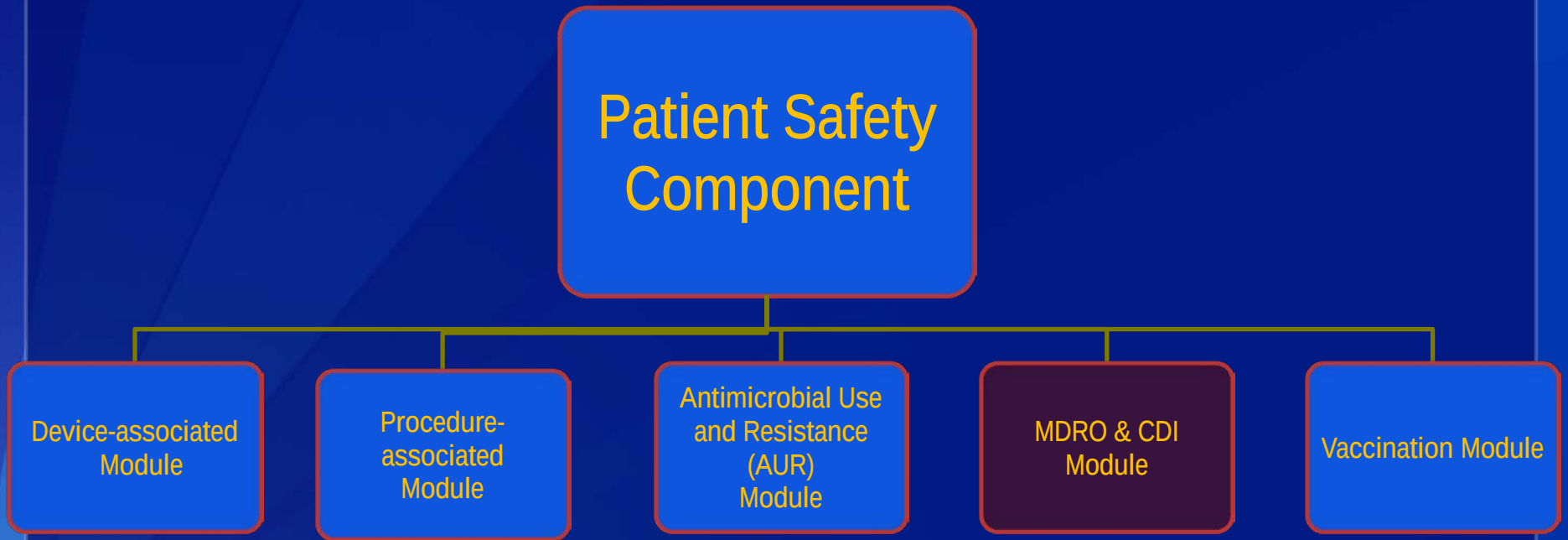
CONCLUSION. While the proportion of resistant isolates did not substantially change from that in the previous 2 years, multidrug-resistant gram-negative phenotypes were reported from a moderate proportion of facilities.

Infect Control Hosp Epidemiol 2013;34(1):1-14

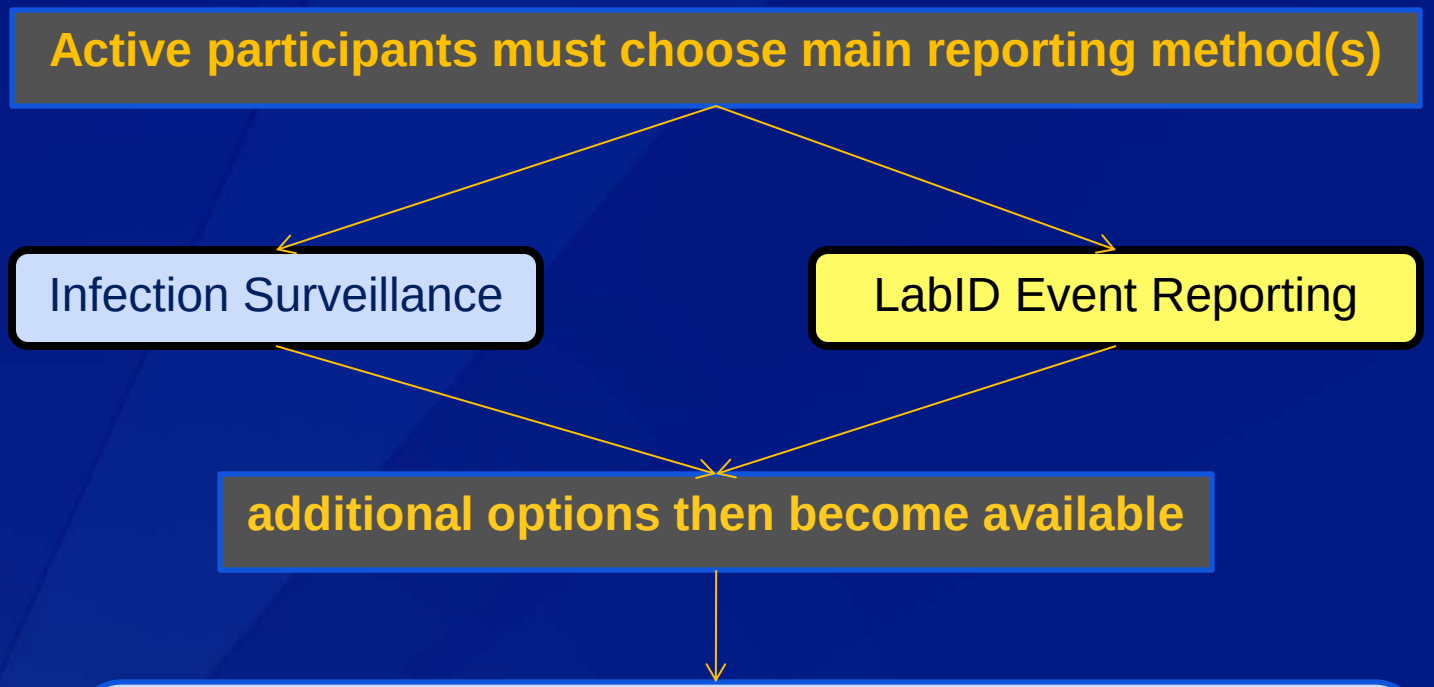
I want to learn more about reporting LabID Events using the MDRO and CDI Module...

Overview of MDRO and CDI Module

Patient Safety Component 5 Modules



Reporting Options in MDRO & CDI Module



Prevention Process Measures:

- Adherence to Hand Hygiene
- Adherence to Gown and Glove Use
- Adherence to Active Surveillance Testing (for MRSA /VRE Only)

Outcome Measures:

- AST Prevalence / Incidence (for MRSA/VRE Only)

Which reporting option do I choose?

It depends on your program objectives, such as:

- Participation in CMS Inpatient Quality Reporting (IQR) Program
- Assess effectiveness of interventions
- Organism specific surveillance using NHSN HAI criteria

And so on…….

My facility does participate in the CMS IQR Program, how do I get us in compliance with the reporting requirements for MRSA Bacteremia & *C. difficile* LabID Events?

For Today, Our Goals Are:

- Understand requirements for MRSA bacteremia and *C. difficile* LabID Event reporting to CMS via NHSN.
- Understand MRSA bacteremia and *C. difficile* LabID Event definitions and protocols.
- Describe how to correctly enter MRSA bacteremia and *C. difficile* LabID data into NHSN.
- Tips for assuring compliance with CMS requirements for IQRP.

If participating in CMS Inpatient Quality Reporting (IQR) Program…

Acute care hospitals must report MRSA Bacteremia and *C. difficile* LabID Events at Facility-wide Inpatient (FacWideIN) level

CMS
MRSA Bacteremia LabID Event

- **Organism:** Methicillin-Resistant *Staphylococcus aureus* (MRSA)
- **Specimen Source:** Blood isolates only
- **Data Collection:** CDC NHSN - MDRO/CDI Module (LabID Event)
- **Required Locations:** All inpatient locations. Referred to as facility-wide inpatient (FacWideIN)
- **Required Data:** Community-Onset (CO) and Healthcare-Onset (HO) MRSA Bacteremia LabID Events

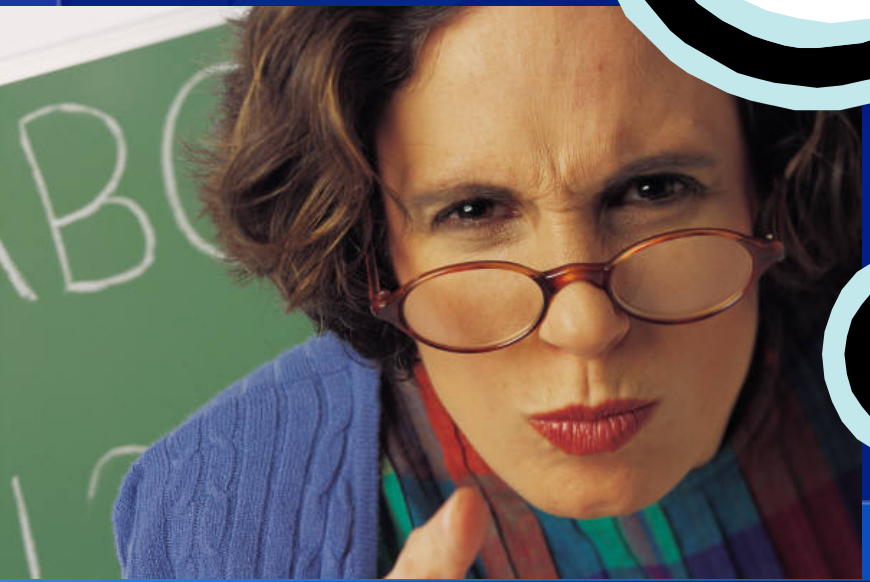
CMS
C. difficile LabID Event

- **Organism:** *Clostridium difficile* (*C. difficile)*
- **Specimen Source:** Loose stools only
- **Data Collection:** CDC NHSN - MDRO/CDI Module (LabID Event)
- **Required Locations:** All inpatient locations (FacWideIN) minus NICU, SCN, or other Well Baby locations (e.g. Nurseries, babies in Labor, Delivery, Recovery , & Post-partum [LDRP])
- **Required Data:** Community-Onset (CO) and Healthcare-Onset (HO) *C. difficile* LabID Events

Do the CMS requirements apply to non acute care facilities?

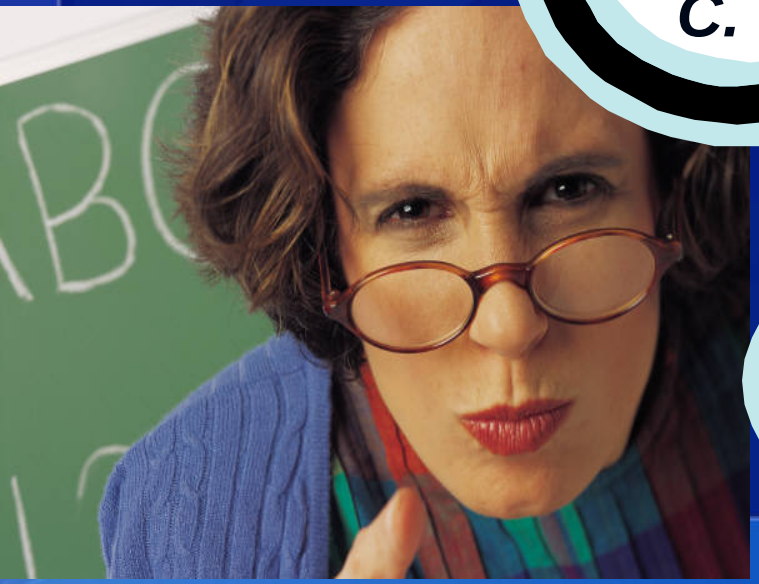
Beginning in 2013,

CMS reporting requirements For facility-wide inpatient MRSA Bacteremia and *C. difficile* LabID Events are specific to Acute Care Hospitals



There's MORE.....

January 2015,
Participating Long Term Care Hospitals (*referred to as Long Term Acute Care Hospitals in NHSN*) will be required to report facility-wide inpatient MRSA Bacteremia and *C. difficile* LabID Events

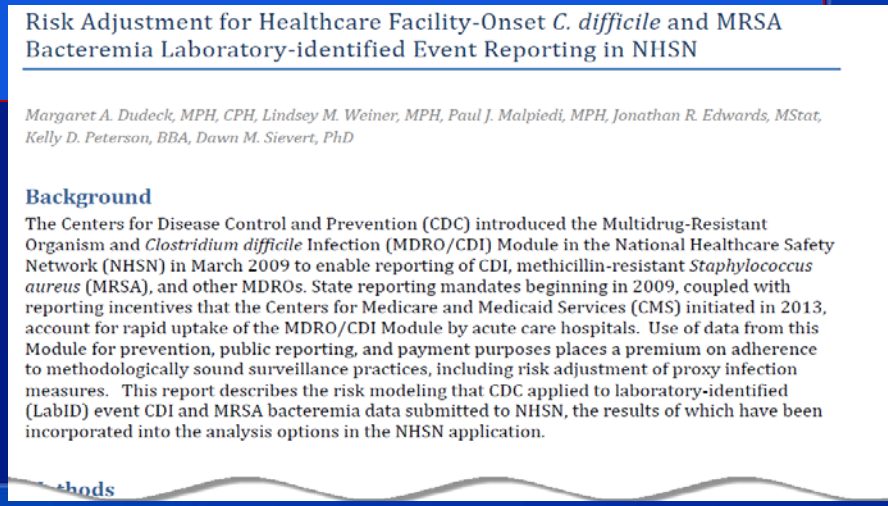


Our hospital has an inpatient rehabilitation facility (IRF) on the second floor. For FacWideIN reporting, should I include LabID Events in the IRF?

In Most Cases YES!!


What information will CDC/NHSN share with CMS?

- All in-plan FacWideIN healthcare facility-onset (HO) MRSA bacteremia and *C. difficile* LabID Event aggregate data from participating acute care hospitals.
- CDC will provide a standardized infection ratio (SIR) for each hospitals' FacWideIN HO MRSA bacteremia and *C. difficile* .
- Although the metric reported to CMS will be a HO SIR, the community-onset (CO) events and the admission prevalence of a hospital will play an important role in risk adjustment, and so both HO and CO LabID events must be reported into NHSN.



Risk Adjustment for Healthcare Facility-Onset *C. difficile* and MRSA Bacteremia Laboratory-identified Event Reporting in NHSN

Margaret A. Dudeck, MPH, CPH, Lindsey M. Weiner, MPH, Paul J. Malpiedi, MPH, Jonathan R. Edwards, MStat, Kelly D. Peterson, BBA, Dawn M. Sievert, PhD

Background

The Centers for Disease Control and Prevention (CDC) introduced the Multidrug-Resistant Organism and *Clostridium difficile* Infection (MDRO/CDI) Module in the National Healthcare Safety Network (NHSN) in March 2009 to enable reporting of CDI, methicillin-resistant *Staphylococcus aureus* (MRSA), and other MDROs. State reporting mandates beginning in 2009, coupled with reporting incentives that the Centers for Medicare and Medicaid Services (CMS) initiated in 2013, account for rapid uptake of the MDRO/CDI Module by acute care hospitals. Use of data from this Module for prevention, public reporting, and payment purposes places a premium on adherence to methodologically sound surveillance practices, including risk adjustment of proxy infection measures. This report describes the risk modeling that CDC applied to laboratory-identified (LabID) event CDI and MRSA bacteremia data submitted to NHSN, the results of which have been incorporated into the analysis options in the NHSN application.

thods

Online Resources – CMS Related

http://www.cdc.gov/nhsn/acute-care-hospital/cdiff-mrsa/index.html

- **Operational Guidance**
- **"How to Set Up NHSN Reporting for Facility-Wide Inpatient MRSA Bacteremia and *C. difficile* LabID events for the CMS Inpatient Quality Reporting Program"**
- **Helpful Tips**
- **Using the SIRs**

Important Dates

- Data must be submitted monthly (within 30 days of the end of the month in which it is collected).
- For data to be shared with CMS, each quarter's data must be entered into NHSN no later than 4 ½ months after the end of the quarter.
  - E.g. Q1 (January-March) data must be entered into NHSN by August 15; Q2 by November 15; Q 3 by February 15 and Q4 by May 15.

I am not familiar with LabID Event Reporting, can you share more details?

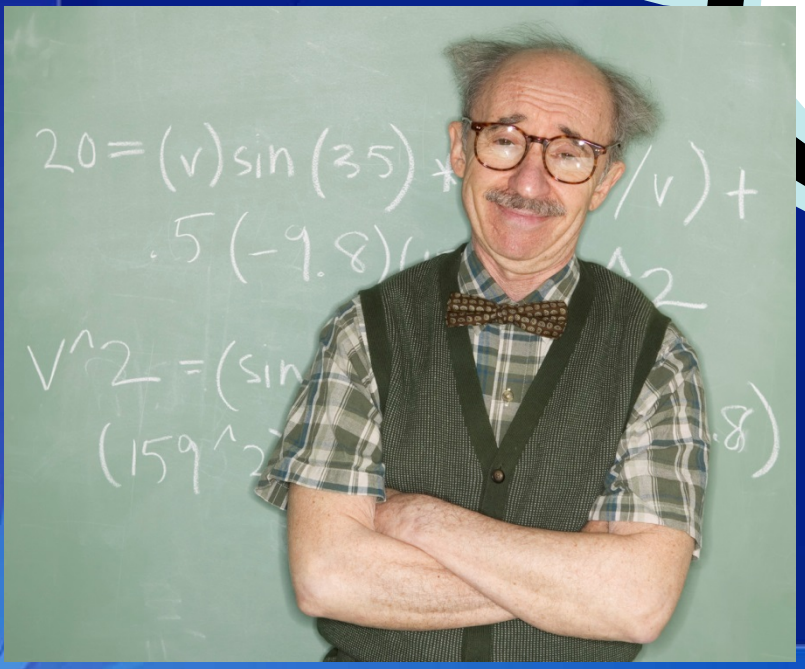
LabID Event reporting allows laboratory testing data to be used without clinical evaluation of the patient, allowing for a much less labor intensive method to track *C. difficile* and MDROs, such as MRSA.

These provide **proxy** infection measures of **healthcare acquisition**, **exposure burden**, and **infection burden** based primarily on laboratory and limited admission data

This methodology seems much different than the HAI methodology I'm used to.

You are CORRECT!

The methodologies utilized in the identification of healthcare-associated infections and LabID Events are different and one is independent of the other.



Advantages of LabID Event Reporting include…..

- **Objective laboratory-based metrics that allow the following without extensive chart review to:**
  - **Identify vulnerable patient populations**
  - **Estimate infection burden**
  - **Estimate exposure burden**
  - **Assess need for and effectiveness of interventions**
- **Standardized case definitions for surveillance increases comparability between clinical settings.**

Recommended metrics from the SHEA/HICPAC Position Paper (2008) were the basis for the MDRO and CDI Module

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY OCTOBER 2008, VOL. 29, NO. 10

SHEA/HICPAC POSITION PAPER

Recommendations for Metrics for Multidrug-Resistant Organisms in Healthcare Settings: SHEA/HICPAC Position Paper

Adam L. Cohen, MD, MPH; David Calfee, MD, MS; Scott K. Fridkin, MD; Susan S. Huang, MD, MPH; John A. Jernigan, MD; Ebbing Lautenbach, MD, MPH, MSCE; Shannon Oriola, RN, CIC, COHN; Keith M. Ramsey, MD; Cassandra D. Salgado, MD, MS; Robert A. Weinstein, MD; for the Society for Healthcare Epidemiology of America and the Healthcare Infection Control Practices Advisory Committee

EXECUTIVE SUMMARY

Monitoring multidrug-resistant organisms (MDROs) and the infections they cause in a healthcare setting is important to detect newly emerging antimicrobial resistance profiles, to identify vulnerable patient populations, and to assess the need for and effectiveness of interventions; however, it is unclear which metrics are the best, because most of the metrics are

quantify the number of people whose MDRO acquisition is healthcare associated. In addition, healthcare facilities may want to calculate both the overall prevalence of carriage and the prevalence of carriage at admission, the latter of which can be useful in detecting importation of methicillin-resistant *S. aureus* into healthcare facilities, to estimate the exposure burden. Active surveillance testing can augment and increase the accuracy of some metrics. Healthcare facilities not per-

Ok, I’m listening.. What is the difference between LabID Event reporting and Infection Surveillance or HAI reporting?

	LabID Event	Infection Surveillance/HAI
Protocol	LabID Event protocol in Chapter 12 of NHSN manual	Site-specific protocol in NHSN manual (e.g., CLABSI, CAUTI….)
Signs & Symptoms	NONE. Laboratory and admission data only, without clinical evaluation of patient	Combination of laboratory data and clinical evaluation of patient (signs/symptoms)
Surveillance Rules	• HAI and POA do **NOT** apply • Transfer Rule does **NOT** apply • Location = location of patient at time of specimen collection • Event date = specimen collection date	• HAI and POA **do** apply • Transfer Rule applies • See NHSN protocol for details regarding location and date of event
Denominator Reporting	• Number of patient days and admissions • Can be reported by specific location or facility-wide, depending on reporting option(s) selected • Inpatient and/or outpatient	• Device days and patient days must be collected separately for each monitored location • Inpatient reporting only (*excluding SSI)*
Categorization of Infections	• Events categorized based on inpatient or outpatient and admission and specimen collection dates • Healthcare Facility Onset (HO) and Community Onset (CO) events must be reported to NHSN	• HAI protocols used • Events are either HAI or not • LabID Event categorizations do **NOT** apply • Only HAIs are reported to NHSN

Does this mean that I must report LabID Events and HAIs separately?

YES

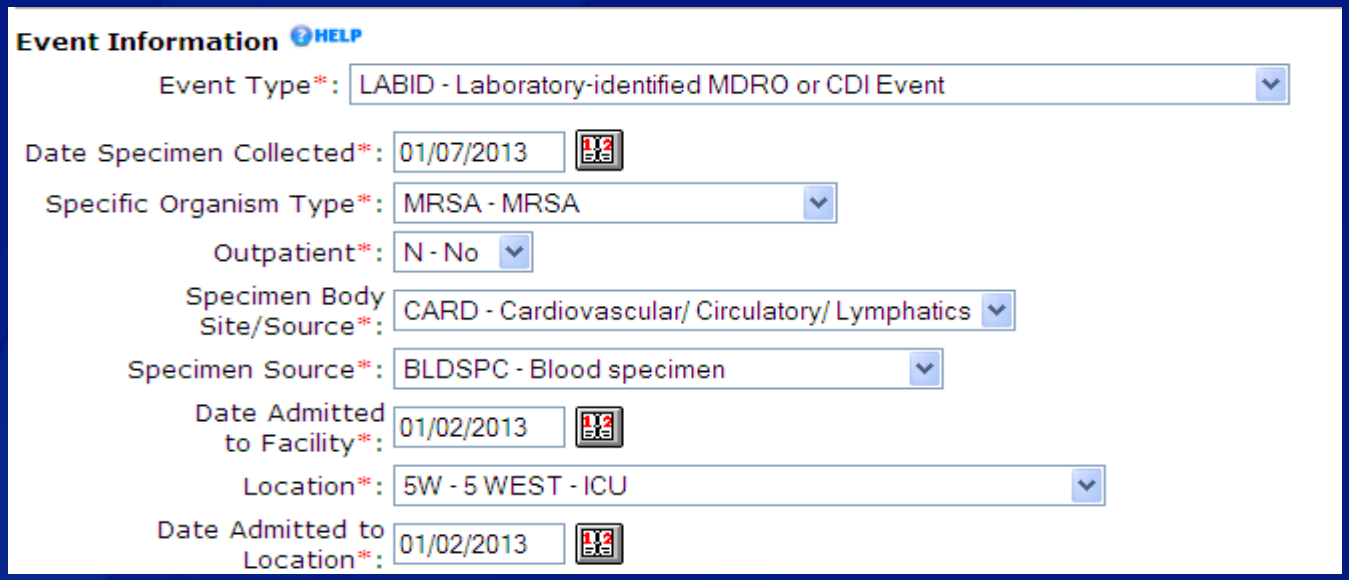
LabID Events and HAI Events are two independent reporting pathways! An Event that is both a LabID Event and an HAI should be reported twice (*if both are in-plan*), once as a LabID Event and also as an HAI.

FOR EXAMPLE……

If you have a patient in the ICU with both a CLABSI and a MRSA bacteremia LabID Event, each Event should be reported separately in the NHSN application:

1. **LCBI-CLABSI Event, *using the applicable HAI criteria*, and**
2. **LabID Event, *using the MRSA bacteremia LabID Event reporting protocol***

Example of MRSA LabID Event & BSI HAI Event with MRSA



Event Information HELP

Event Type*: LABID - Laboratory-identified MDRO or CDI Event

Date Specimen Collected*: 01/07/2013

Specific Organism Type*: MRSA - MRSA

Outpatient*: N - No

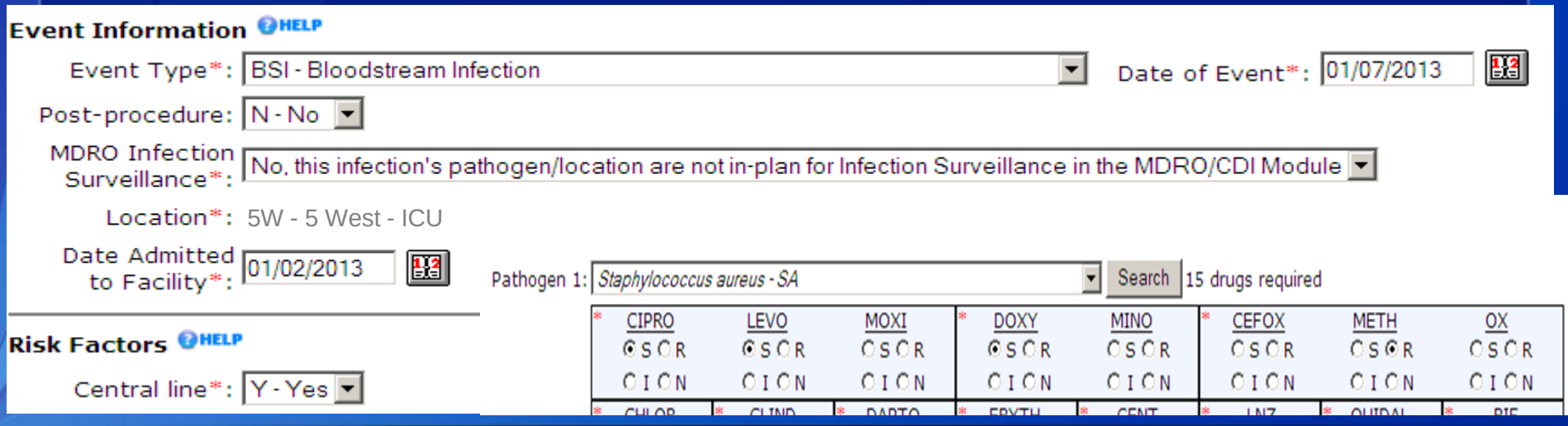
Specimen Body Site/Source*: CARD - Cardiovascular/ Circulatory/ Lymphatics

Specimen Source*: BLDSPC - Blood specimen

Date Admitted to Facility*: 01/02/2013

Location*: 5W - 5 WEST - ICU

Date Admitted to Location*: 01/02/2013



Event Information HELP

Event Type*: BSI - Bloodstream Infection

Date of Event*: 01/07/2013

Post-procedure: N - No

MDRO Infection Surveillance*: No, this infection's pathogen/location are not in-plan for Infection Surveillance in the MDRO/CDI Module

Location*: 5W - 5 West - ICU

Date Admitted to Facility*: 01/02/2013

Pathogen 1: *Staphylococcus aureus - SA* Search 15 drugs required

CIPRO	LEVO	MOXI	DOXY	MINO	CEFOX	METH	OX
S R	S R	S R	S R	S R	S R	S R	S R
I N	I N	I N	I N	I N	I N	I N	I N

Risk Factors HELP

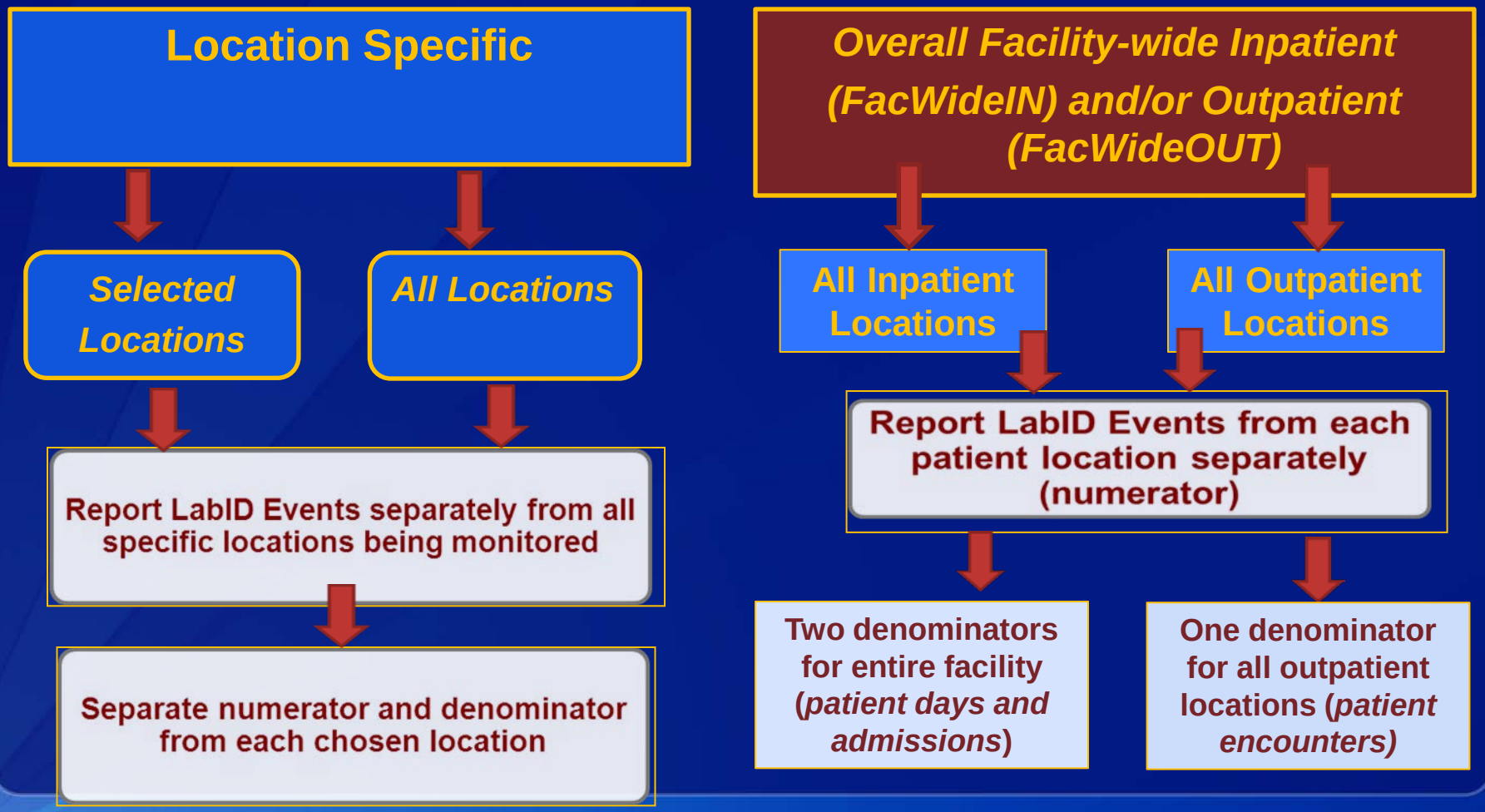
Central line*: Y - Yes

How do I get started with reporting my MRSA bacteremia and *C. difficile* LabID Events?

"CHECKLIST"
For Facility-wide Inpatient MRSA Bacteremia & *C. difficile* LabID Event Reporting

- **Review location options and map inpatient locations in NHSN as necessary.**
- **Review Monthly Reporting Plan(s) and update as necessary.**
- **Identify and enter all MRSA bacteremia and *C. difficile* LabID events into NHSN by location.**
- **Enter FacWideIN denominator data for each month under surveillance.**
- **Resolve "Alerts", if applicable.**

You have several options for Location Reporting



Since LabID Events must be reported on the unit level, how do I set-up my locations for facility-wide inpatient (FacWideIN) reporting?

Facility-wide Inpatient FacWideIN

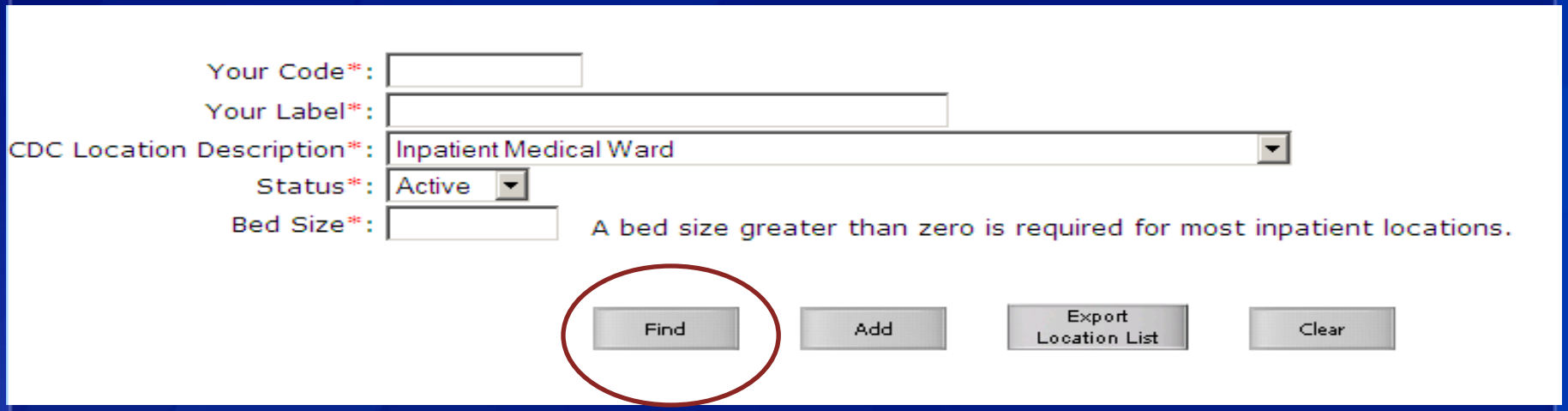
Option for LabID Event reporting only!

Includes inpatient locations*, including observation patients housed in an inpatient location

* See C. difficile LabID Event protocol for location exclusions

PS Home Page: Facility > Locations

Find Locations: All or Specific Search



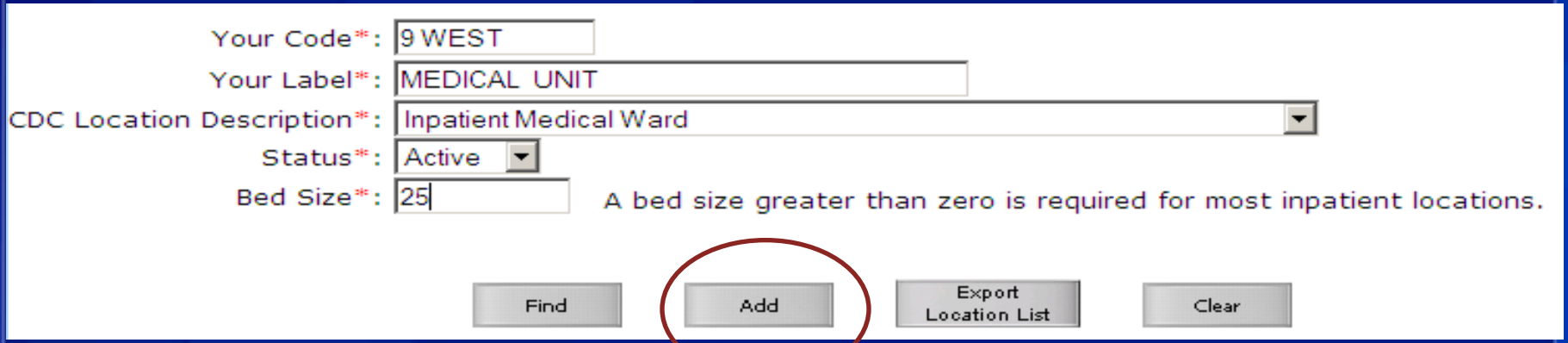
Display All | Print Location List

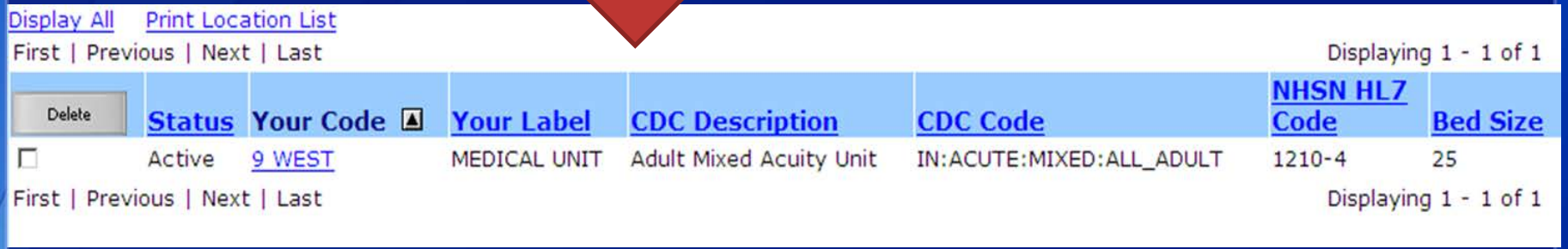
First | Previous | Next | Last — Displaying 1 - 6 of 6

Delete	Status	Your Code	Your Label	CDC Description	CDC Code	NHSN HL7 Code	Bed Size
☐	Active	3 CENTRAL	3 CENTRAL	Inpatient Medical Ward	IN:ACUTE:WARD:M	1060-3	20
☐	Active	4F	MEDICAL PATIENTS	Inpatient Medical Ward	IN:ACUTE:WARD:M	1060-3	22
☐	Active	INMEDWARD	INMEDWARD	Inpatient Medical Ward	IN:ACUTE:WARD:M	1060-3	5
☐	Active	MD WARD	MEDICAL WARD	Inpatient Medical Ward	IN:ACUTE:WARD:M	1060-3	
☐	Active	OTHERHOSP	OTHERHOSP	Inpatient Medical Ward	IN:ACUTE:WARD:M	1060-3	30
☐	Active	SCA2	TEST SCA LOCATION	Inpatient Medical Ward	IN:ACUTE:WARD:M	1060-3	15

First | Previous | Next | Last — Displaying 1 - 6 of 6

Add Location: Specify Location Info





"CHECKLIST"
For Facility-wide Inpatient MRSA Bacteremia & *C. difficile* LabID Event Reporting

- ✓ Review location options and map inpatient locations in NHSN as necessary.
- ❑ **Review Monthly Reporting Plan(s) and update as necessary.**
- ❑ Identify and enter all MRSA bacteremia and *C. difficile* LabID events into NHSN by location.
- ❑ Enter FacWideIN denominator data for each month under surveillance.
- ❑ Resolve "Alerts", if applicable.

Monthly Reporting Plan

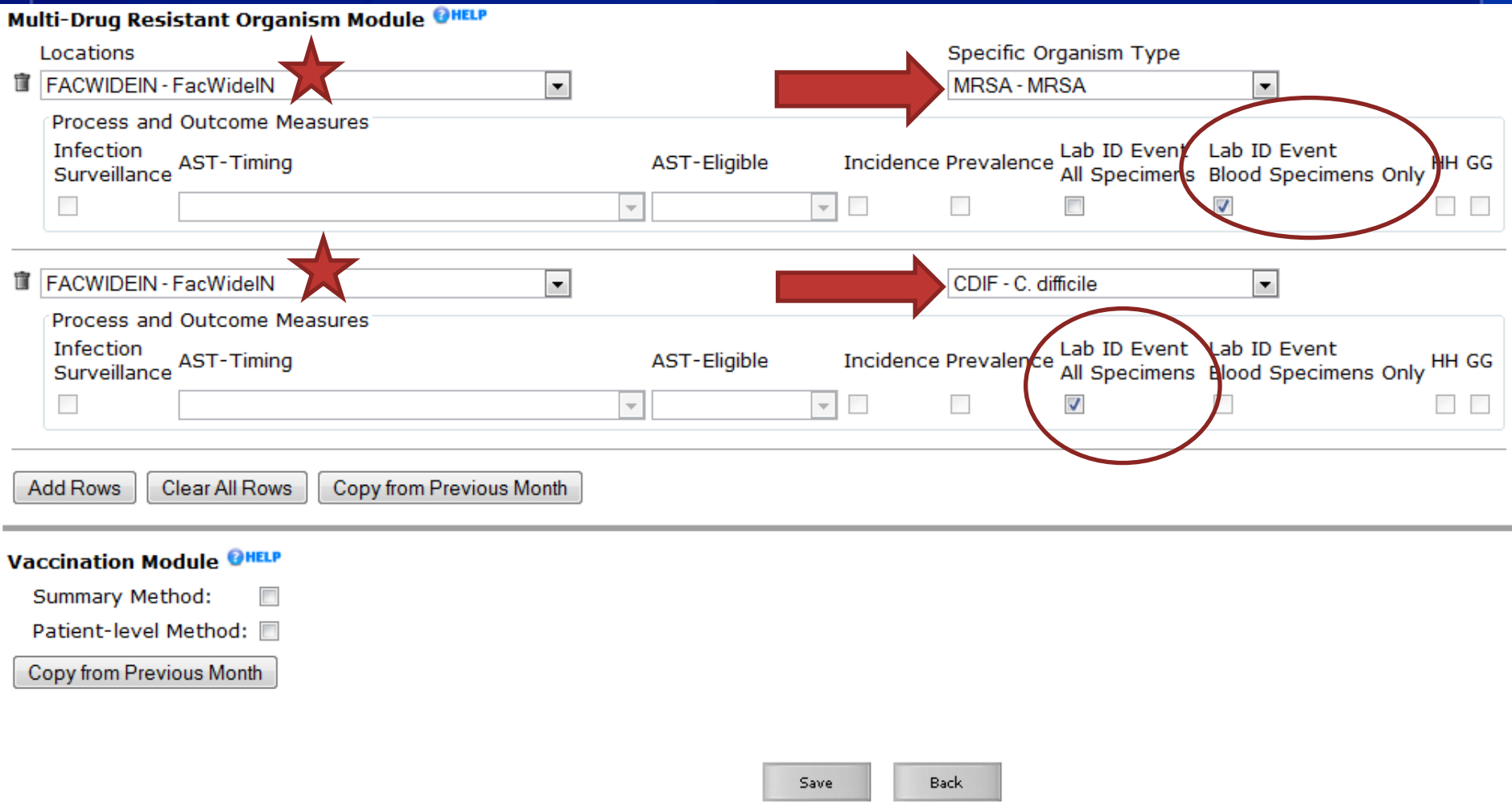
- **The Monthly Reporting Plan informs CDC which modules a facility is participating in during a given month**
  - Referred to as “In-Plan” data
- **The Plan also informs CDC which data can be used for aggregate analyses**
  - This INCLUDES sharing applicable data with CMS!
- **A facility must enter a Plan for every month of the year**
- **Plans can be modified retrospectively**

Monthly Reporting Plan

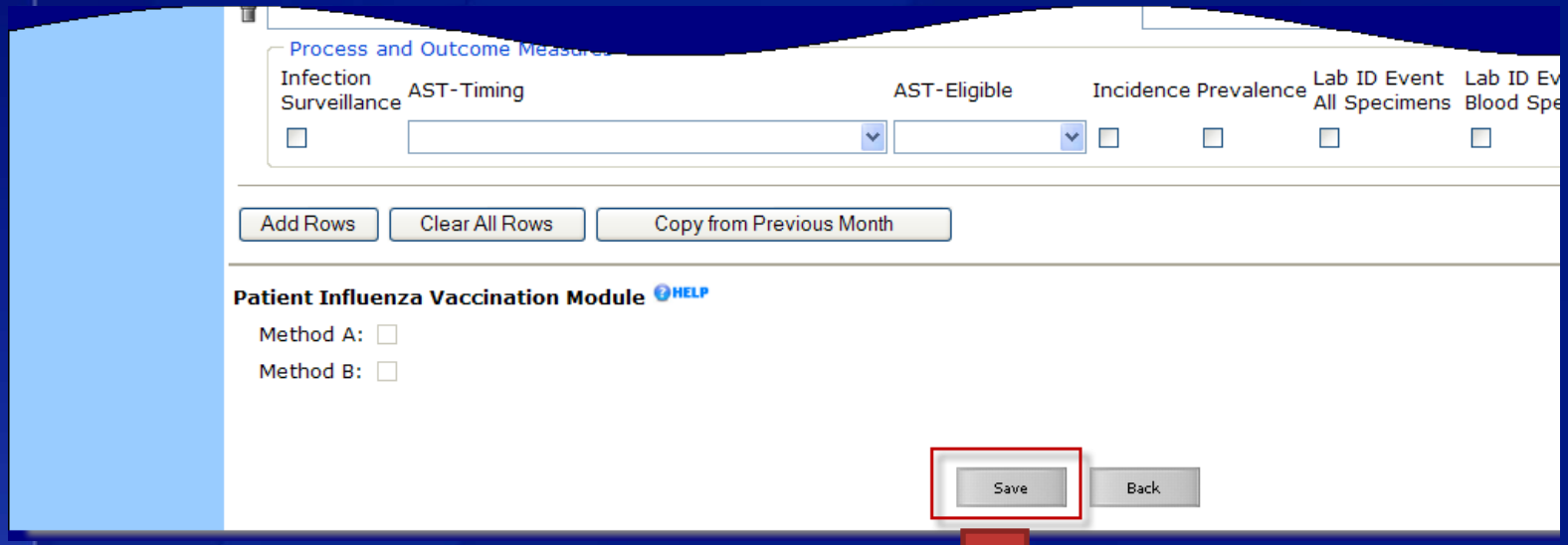
- **NHSN will only submit data to CMS for those complete months in which the following are indicated on the monthly reporting plan:**
  - FacWideIN MRSA LabID – either “Blood Specimens Only” or “All Specimens”
  - FacWideIN CDI LabID

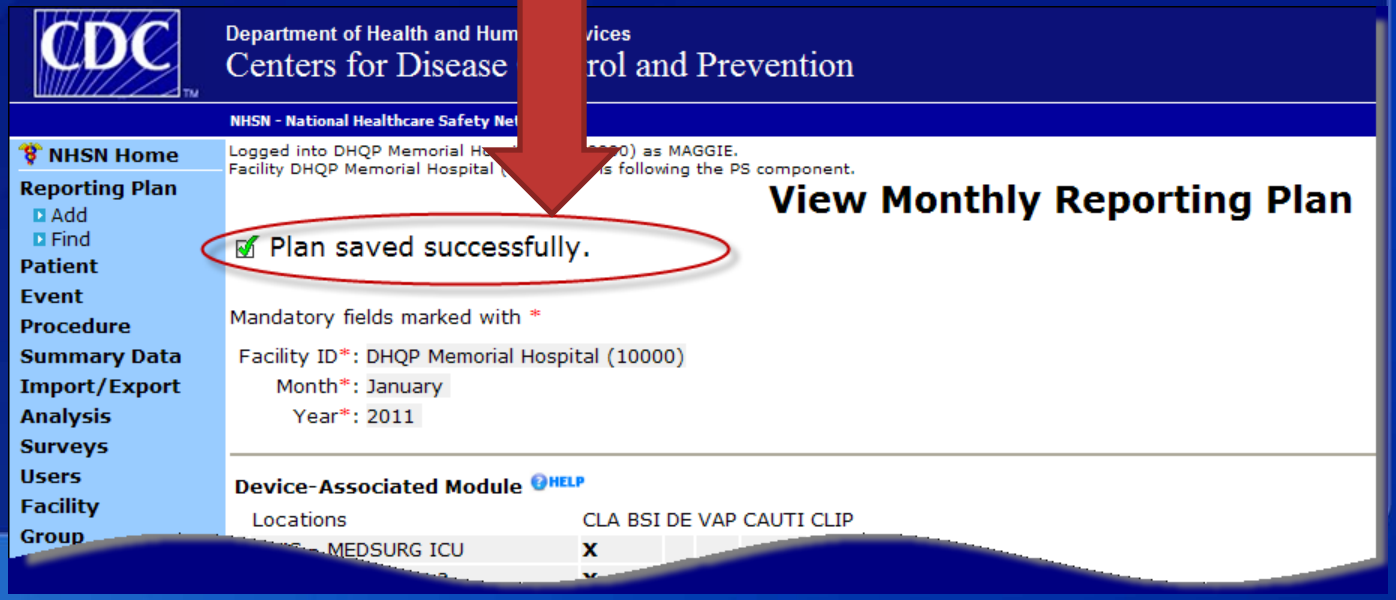
Monthly Reporting Plan

Monthly Reporting Plan



Monthly Reporting Plan





Monthly Reporting Plan

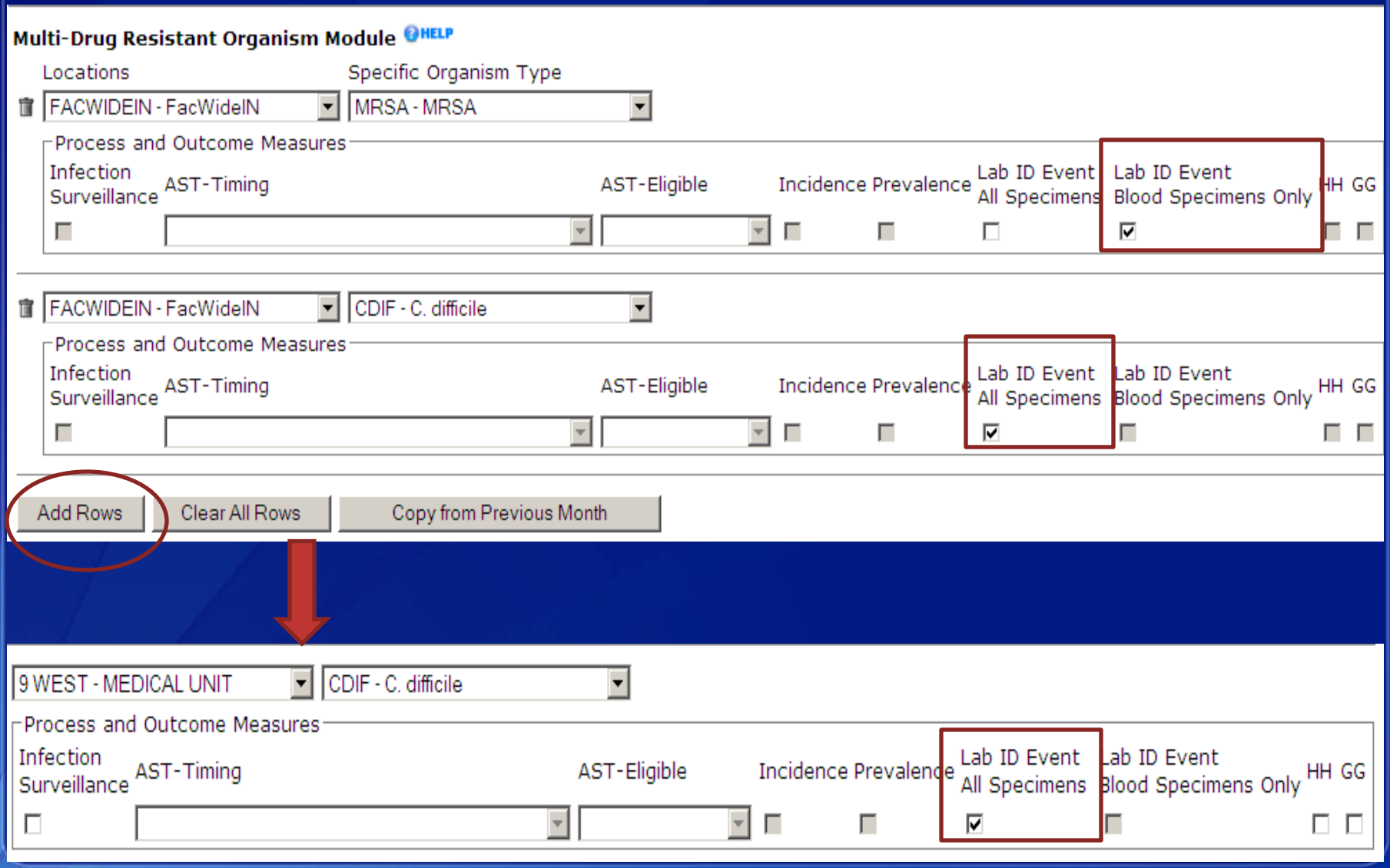
If your facility chooses to report LabID Events for all MRSA specimens (and indicates this in the plan), only those MRSA LabID Events from blood specimens will be included in the aggregate data sent to CMS.

We are participating in a *C. difficile* prevention collaborative in one of the inpatient units. I want to target *C. difficile* LabID Events in that unit in addition to the FacWideIN monitoring. How do I add this unit to my monthly plan?

Monthly Reporting Plan

- To MODIFY a Plan:

Monthly Reporting Plan

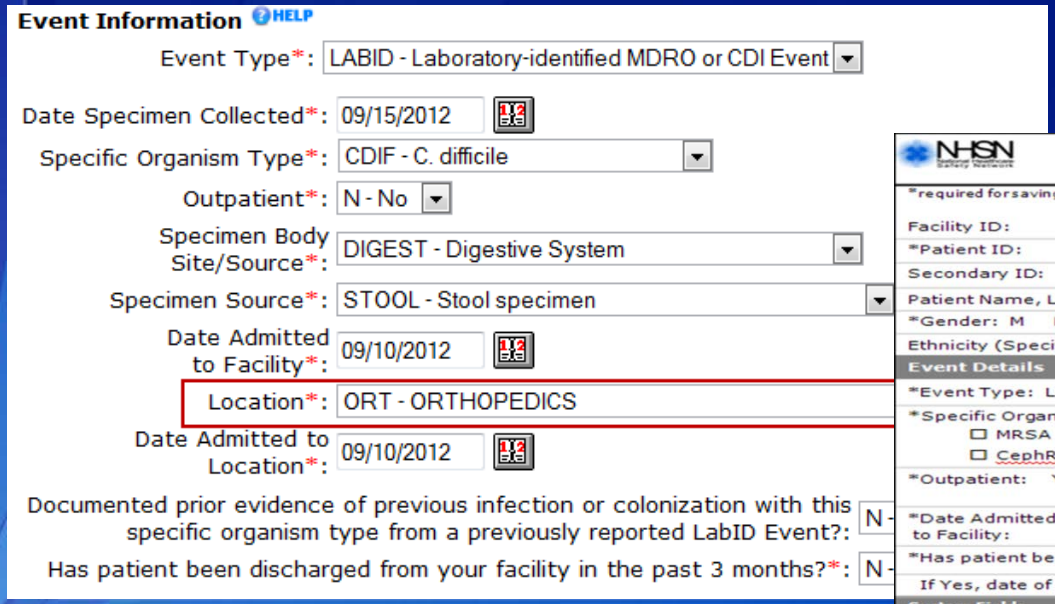


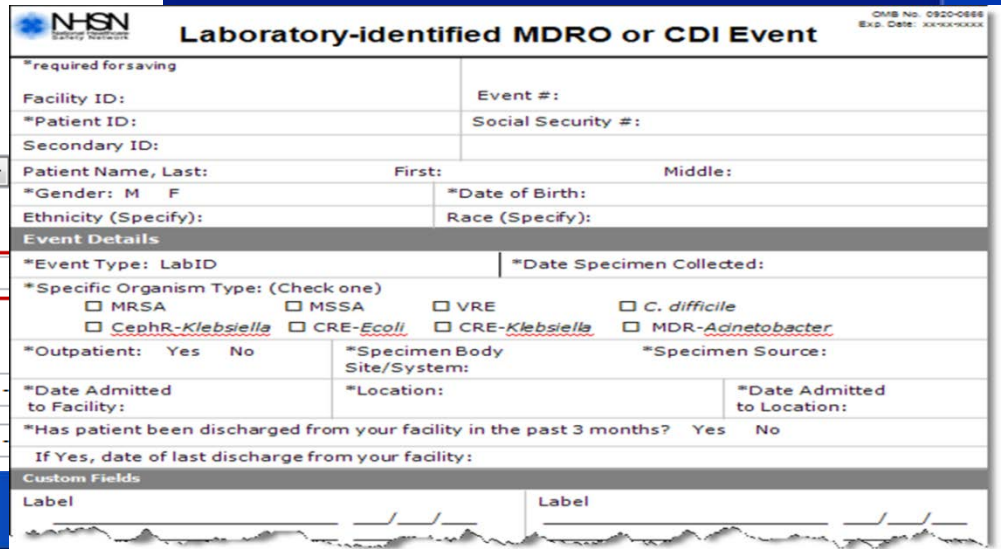
"CHECKLIST"
For Facility-wide Inpatient MRSA Bacteremia & *C. difficile* LabID Event Reporting

- ✓ Review location options and map inpatient locations in NHSN as necessary.
- ✓ Review Monthly Reporting Plan(s) and update as necessary.
- ❑ **Identify and enter all MRSA bacteremia and *C. difficile* LabID events into NHSN by location.**
- ❑ Enter FacWideIN denominator data for each month under surveillance.
- ❑ Resolve "Alerts", if applicable.

LabID Events

- Use the MDRO/CDI protocol to identify MRSA bacteremia and *C. difficile* LabID Events
- ALL identified MRSA bacteremia and *C. difficile* LabID Events from all inpatient locations must be entered into NHSN
- This means the specific location where the patient was assigned at the time of specimen collection must be indicated as the location (*see provision for affiliated outpatient locations*)



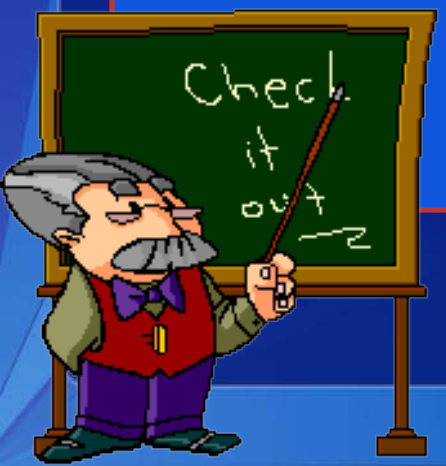


For FacWideIN LabID Event Reporting

Emergency Department or Affiliated Outpatient Location.....

If date of specimen collection = physical inpatient admission calendar date

Report as LabID Event for admitting inpatient location



For FacWideIN & Outpatient (e.g. FacWideOUT) LabID Event Reporting

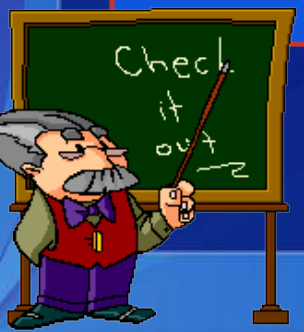
Emergency Department or Affiliated Outpatient Location.....

If date of specimen collection = physical inpatient admission calendar date

Report as LabID Event for admitting inpatient location

AND

Report as LabID Event for outpatient location



What if the specimen was collected from ED location on 4/1 at 11:55 pm and the patient was later admitted to an inpatient location on 4/2 at 12:03 am, can I enter this as an inpatient LabID Event for FacWideIN?

Specimen collection day and admission day must be the SAME calendar day, no exceptions. The NHSN application only recognizes calendar days and not 24° as a day

Overview

MRSA Bacteremia LabID Event Reporting in NHSN

Setting

Can occur in any inpatient or outpatient location.

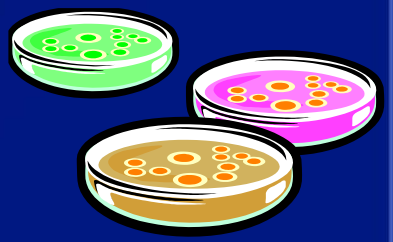
NOTE: For FacWideIN LabID Event reporting, only inpatient locations are included unless the patient is admitted to inpatient location on the same calendar day as specimen collection from an affiliated outpatient location

Definition
MRSA Positive Blood Isolate

Any blood specimen obtained for clinical decision making for MRSA

(***excludes screening cultures, such as those used for active surveillance testing***)

Definition
MRSA Bacteremia
LabID Event



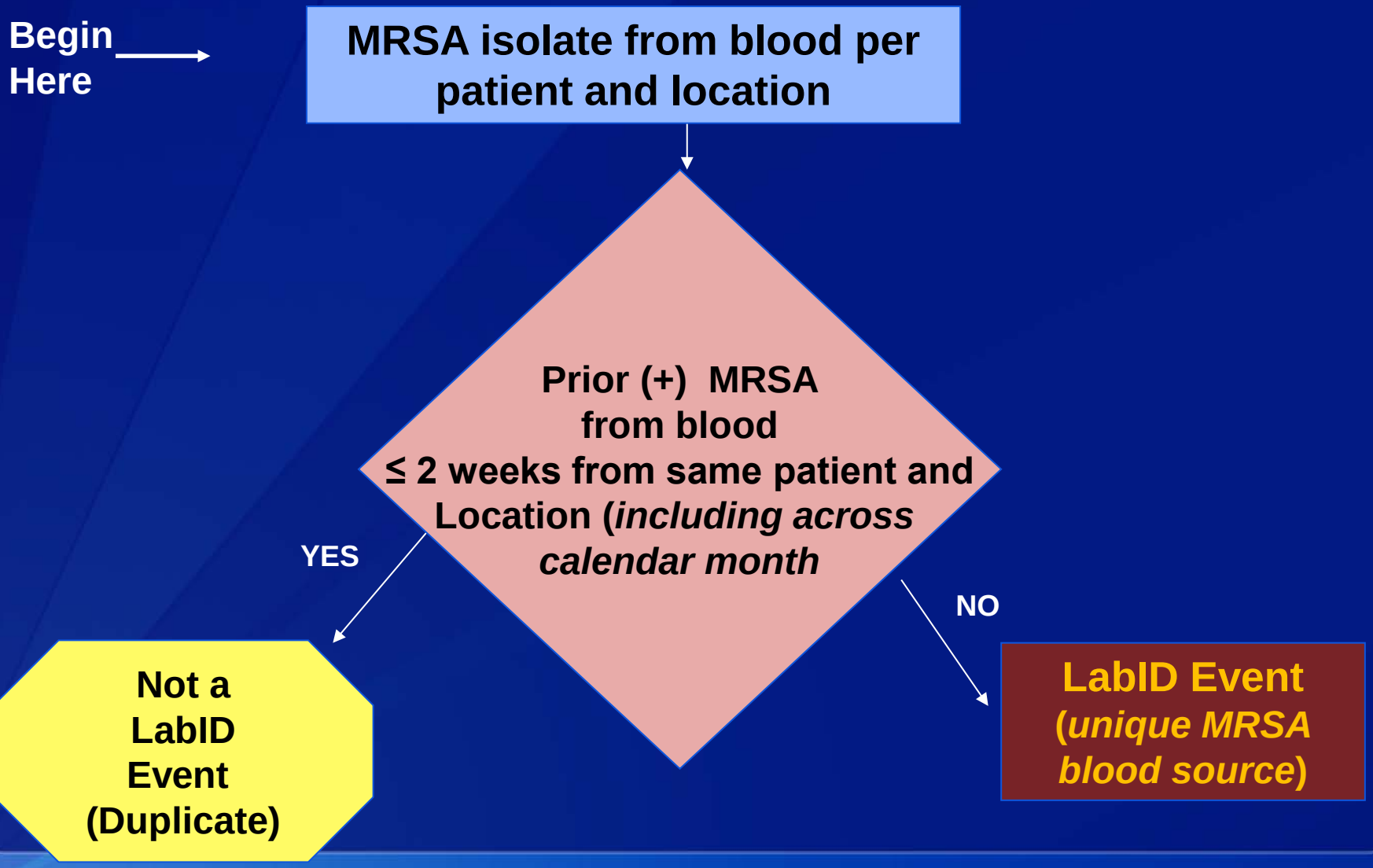
MRSA positive blood specimen for a patient in a location with no prior MRSA positive blood specimen result collected within 14 days for the patient and location (*includes across calendar months for Blood Specimen Only reporting*)

Also referred to as non-duplicate LabID Events

Definition
Duplicate MRSA Bacteremia LabID Event

Any MRSA blood isolate from the same patient and same location, following a previous positive MRSA blood laboratory result within the past 14 days (*including across calendar months for blood specimens only reporting*)

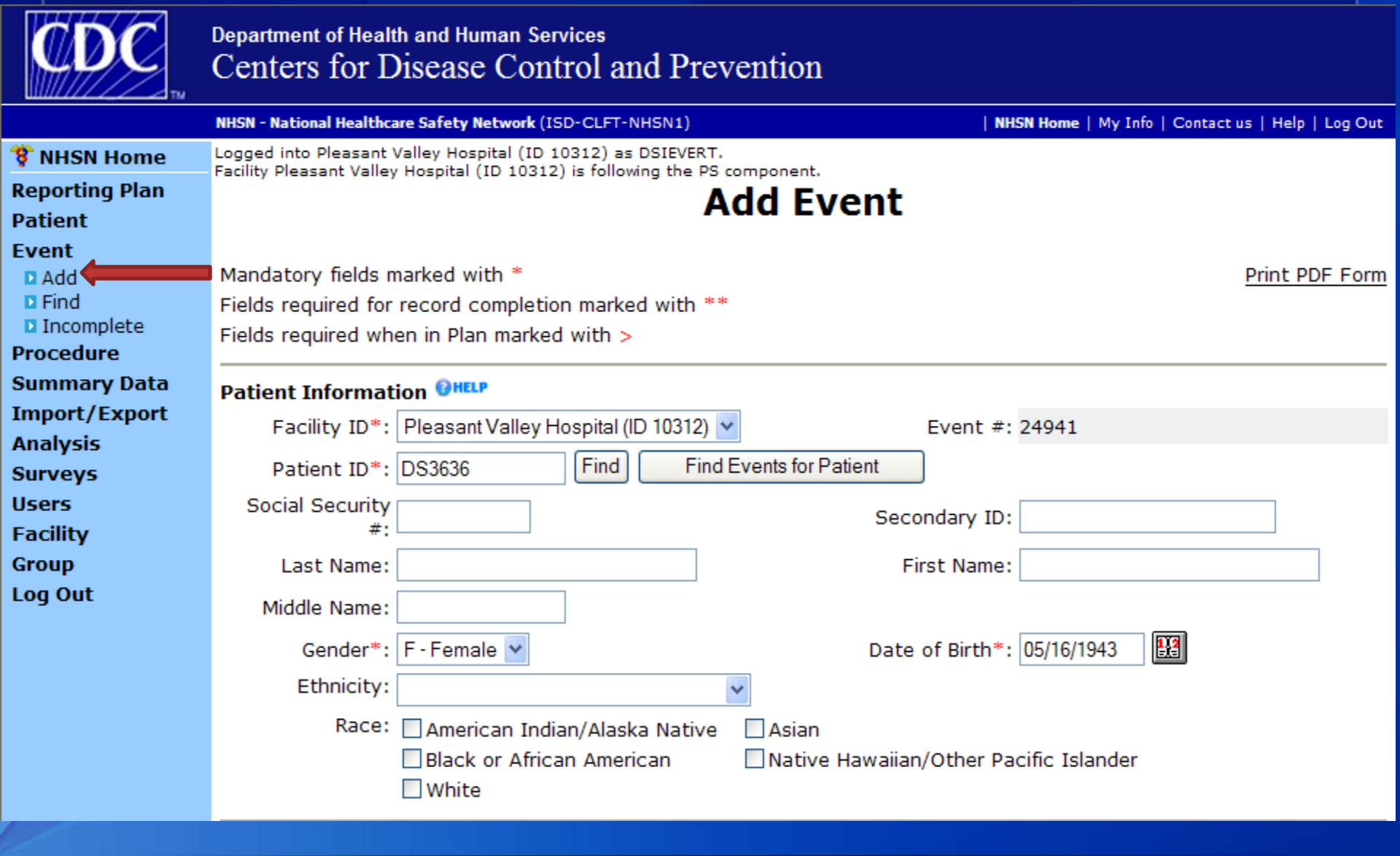
MRSA Bacteremia LabID Event Reporting
Blood Specimen Only



Adapted from Figure 1 MDRO Test Results Algorithm for Blood Specimens Only LabID Events

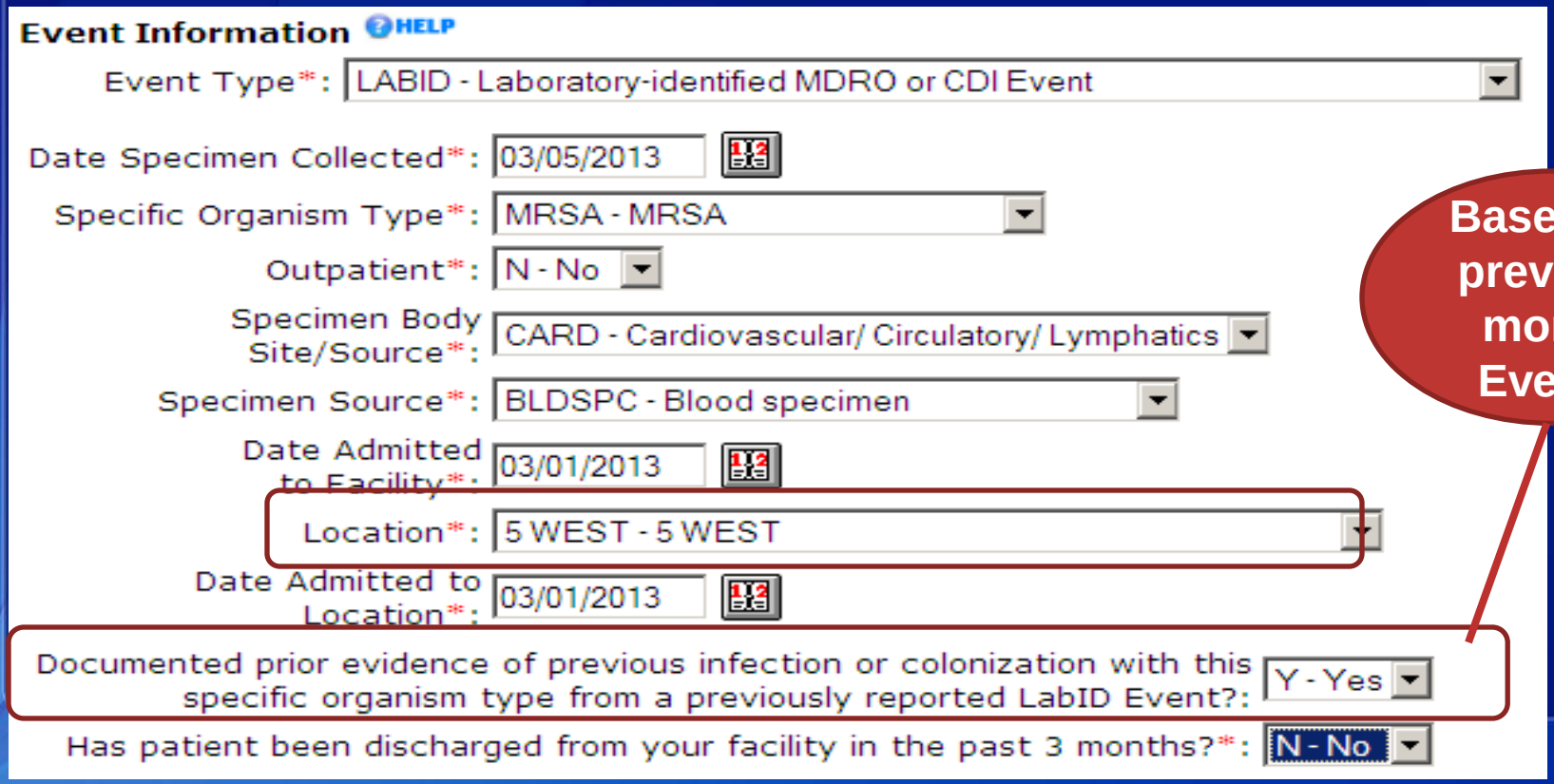
What do I do once I identify a MRSA bacteremia LabID Event?

Event - Patient Information



Add Event Information

- For FacWideIN reporting, ALL identified non-duplicate MRSA bacteremia LabID events from all inpatient locations must be entered into NHSN
- The specific inpatient location where the patient was assigned at the time of specimen collection must be indicated!



What if the electronic medical record shows that the patient was admitted on 4/1/13, but the patient remained in the ED until 4/2/13, what admission date should I use?

4/2/13

The admission date should reflect the date the patient was physically admitted to an inpatient location. Time spent in the ED or other outpatient location (observation unit) should not contribute towards inpatient counts.

If a patient has a history of MRSA, can I change the "*documented prior evidence of infection or colonization with this specific organism type from previously reported LabID Events*" to indicate Yes?

This field is auto populated by NHSN, based on <u>prior month</u> LabID Events entered by your facility for the organism (MRSA/MDRO).

What is the purpose of "*documented prior evidence of infection or colonization with this specific organism type from previously reported LabID Events*" if I can't change the data field?

The information is used in the calculation of MDRO Infection/Colonization Incidence Rate when a facility is reporting all specimens (not just blood).

What this means is that facilities are not being penalized when it comes to the overall (all specimen) infection/colonization incidence rate, as all "YES" previous positive Events are excluded.

****This data field is not used for *C. difficile* analysis.**

Since I must enter ALL MRSA bacteremia LabID Events, how does the NHSN application know which ones are healthcare associated?

REMEMBER

LabID Events are <u>not</u> identified as HAIs since these are considered proxy infection measures only. Instead, NHSN will categorize MRSA LabID Events as Healthcare Facility-Onset (HO) or Community-Onset (CO)

NHSN will Categorize your MRSA Blood Specimen LabID Events as CO or HO

NHSN Application Categorizes* LabID Events As:

- **Community-Onset (CO): LabID Event specimen collected as an inpatient ≤ 3 days after admission to the facility (i.e., days 1 (admission), 2, or 3)**
- **Healthcare Facility-Onset (HO): LabID Event specimen collected > 3 days after admission to the facility (i.e., on or after day 4)**

***Based on Inpatient Admission & Specimen Collection Dates**

What if the patient was admitted with a suspected BSI, but the blood culture was not collected until Day 4, will this still count as a healthcare facility onset (HO) LabID Event for my facility?

LabID Events are categorized as HO or CO based on admission date and specimen collection date. Exceptions are not made for signs/symptoms. This allows for more effective standardization of reporting across all facilities.

Let's Review
MRSA Bacteremia LabID Events for FacWideIN

- ✓ MRSA blood specimens MUST be monitored throughout all inpatient locations within a facility.
- ✓ All MRSA blood LabID Event(s) MUST be entered whether community-onset (CO) or healthcare facility-onset (HO).
- ✓ A blood specimen qualifies as a LabID Event if there has not been a previous positive blood culture result for the patient, organism (MRSA), and location within the previous 14 days.
- ✓ Specimens collected from ED or other affiliated outpatient location may be entered for FacWideIN ONLY if specimen collection date = admission date.

Overview

C. difficile LabID Event Reporting in NHSN

Setting

Can occur in any inpatient or outpatient location except locations known to predominantly house babies. This includes: neonatal intensive care unit (NICU), specialty care nursery (SCN), babies in labor, delivery, recovery, post-partum (LDRP), well-baby nurseries, or well-baby clinics.

Setting

For FacWideIN LabID Event reporting, only inpatient locations are included unless the patient is admitted to an inpatient location on the same calendar day as specimen collection from an affiliated outpatient location

Do I also exclude babies housed in pediatric or other non-baby locations?

The intent is to maximize standardization and to eliminate extra burden in identifying & removing infants <12 months of age from units that do not predominantly care for this age group. Therefore, users should only exclude locations that are known to predominantly house infants (*see NHSN 80/20 Rule*).

Definition
CDI Positive Laboratory

- A positive laboratory test result for C. *difficile* toxin A and/or B, (includes molecular assays [PCR] and/or toxin assays)

OR

- A toxin-producing C. *difficile* organism detected by culture or other laboratory means performed on a stool sample

C. difficile **testing only on <u>unformed</u> stool samples!!**

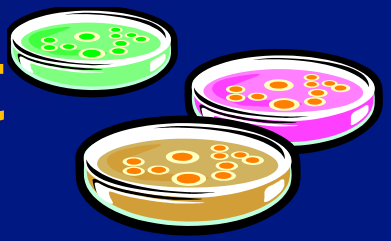
Stool should conform to shape of container

All of these different laboratory tests *for C. difficile* confuse me!! Can you help me to understand the differences between these tests?

CDI LabID Event: Laboratory Testing

Diagnostic Test	Demonstrates Evidence of Toxigenic Strain		Comments
	YES	NO	
Glutamate dehydrogenase (GDH) antigen		X	Detects antigen in both toxin and non-toxin producing strains
Toxin enzyme immunoassay (EIA)	X		• *C. difficile* toxin A and/or B • GDH plus EIA for toxin (2-step algorithm)
Nucleic acid amplification test [NAAT](e.g., PCR, LAMP)	X		• *C. difficile* toxin B gene • GDH plus NAAT (2-step algorithm) • GDH plus EIA for toxin, followed by NAAT for discrepant results
Cell cytotoxicity neutralization assay (CCNA)	X		• Requires tissue culture
Toxigenic (cytotoxic) *C. difficile* culture	X+		+Requires use of second test for toxin detection

Definition
CDI LabID Event



A toxin-positive C. *difficile* stool specimen for a patient in a location with no prior C. *difficile* specimen result reported within 14 days for the patient and location

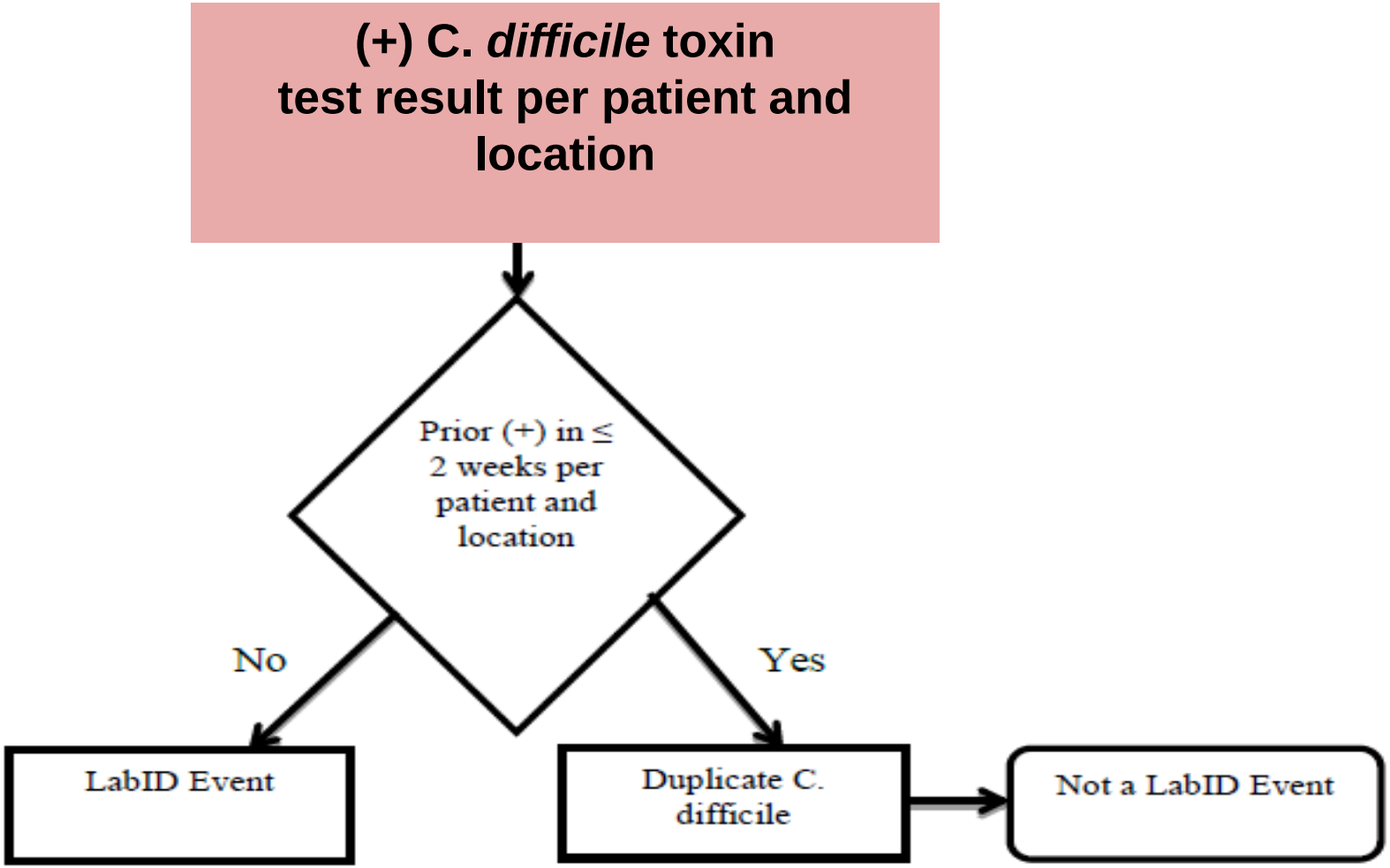
Also referred to as non-duplicate LabID Events

Definition
Duplicate C. *difficile* Positive Test

Any C. *difficile* toxin-positive laboratory result from the same patient and same location, following a previous C. *difficile* toxin-positive laboratory result within the past 14 days

Identifying a *C. difficile* LabID Event

Figure 2. C. difficile test Results Algorithm for Laboratory-Identified (LabID) Events



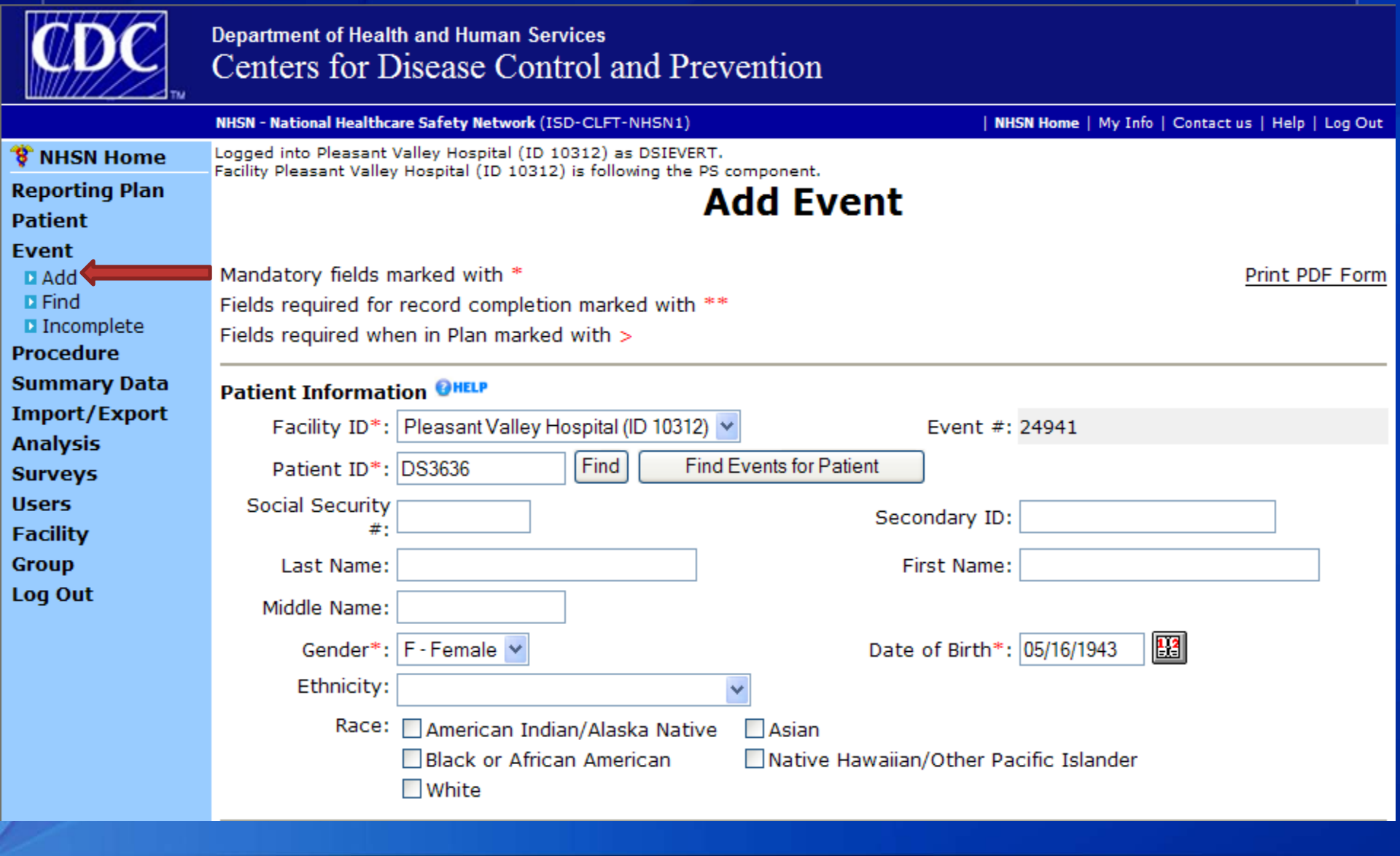
Are you saying that I must report two LabID Events if a patient has a toxin positive stool collected while in two different locations, even if collection occurs within the 14-day time-frame?

YES.

A new LabID Event from a new location within the facility should be reported. This allows users to follow patients that carry potential exposure & transmission burden to new locations in the facility. The NHSN system is designed when calculating events at the FacWideIN level to remove the duplicates.

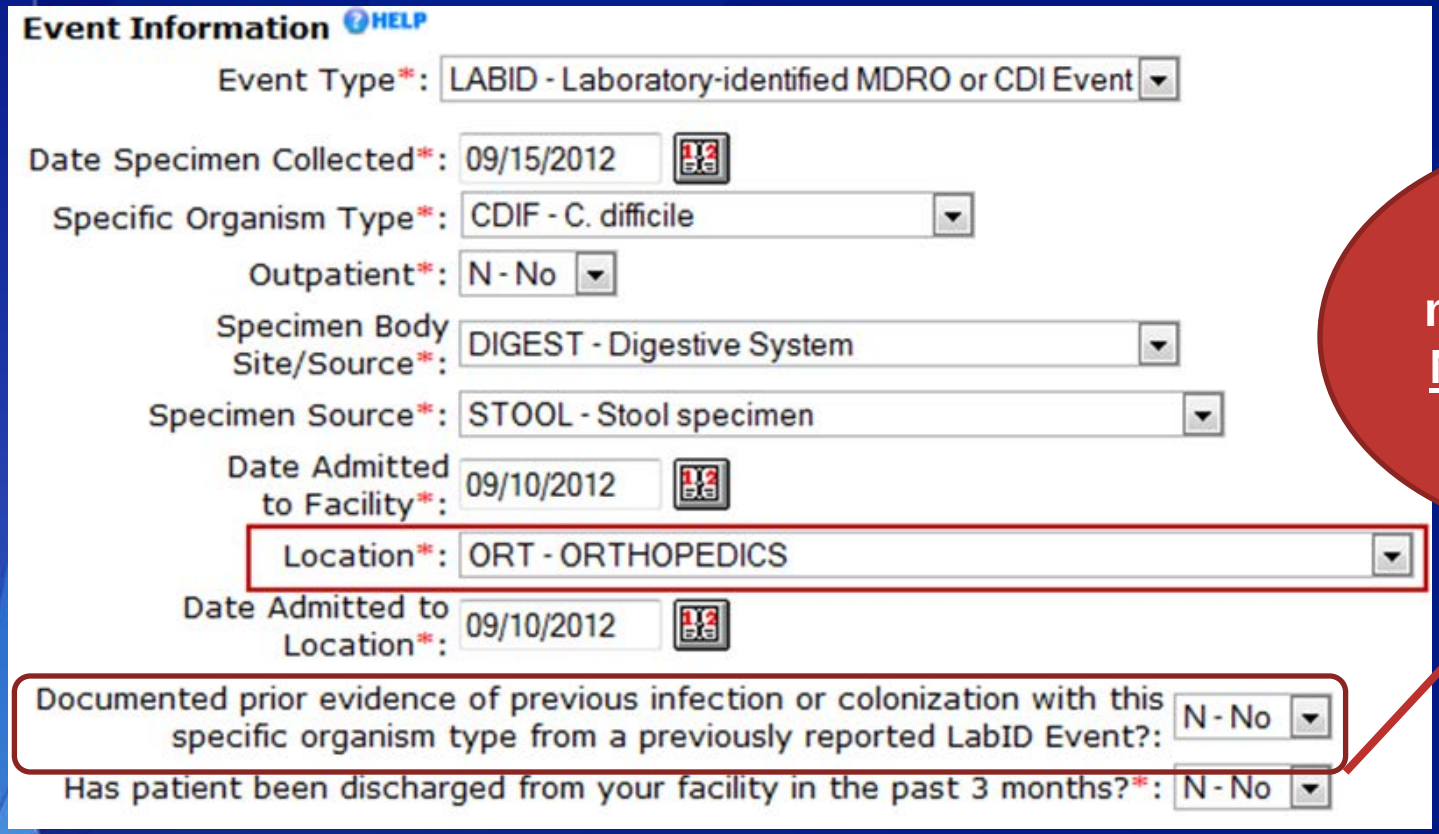
Once I identify a *C. difficile* LabID Event, what is the next step?

Event - Patient Information



Add Event Information

- For FacWideIN reporting- ALL identified non-duplicate *C. difficile* LabID Events from inpatient locations* must be entered into NHSN
- The specific inpatient location where the patient was assigned at



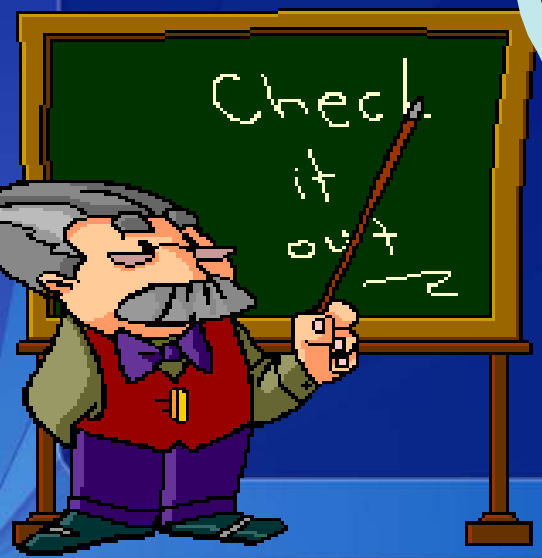
Based on prior months' Events. Not used in CDI calculations

* Excluding baby locations- NICU, SCN, well baby, babies in LDRP

What if the electronic medical record shows that the patient was admitted on 4/1, but the patient remained in the ED until 4/2, what admission date should I use?

AND, The Answer Is……

The admission date should reflect the date the patient was physically admitted to an inpatient location. Time spent in the ED or other outpatient location (observation unit) should not contribute towards inpatient counts.



Since I must enter ALL *C. difficile* LabID Events, how does the NHSN application know which ones are healthcare associated?

REMEMBER…

LabID Events are <u>not</u> identified as HAIs since these are considered proxy infection measures only. Instead, NHSN will categorize *C. difficile* LabID Events as Healthcare Facility-Onset (HO), Community-Onset (CO), or Community-Onset Healthcare Facility-Associated (CO-HCFA)

NHSN will Categorize *C. difficile* LabID Events Based on Inpatient Admission & Specimen Collection Dates

- **Healthcare Facility-Onset (HO): LabID Event specimen collected > 3 days after admission to the facility (i.e., on or after day 4).**
- **Community-Onset (CO): LabID Event specimen collected as an inpatient ≤ 3 days after admission to the facility (i.e., days 1 (admission), 2, or 3).**
- **Community-Onset Healthcare Facility-Associated (CO-HCFA): CO LabID Event collected from a patient who was discharged from the facility ≤ 4 weeks prior to the date current stool specimen was collected.**

NHSN will Further Categorize *C. difficile* LabID Events based on Specimen Collection Date & Prior Specimen Collection Date of a Previous CDI LabID Event (that was entered into NHSN)

- **Incident CDI Assay:** Any CDI LabID Event from a specimen obtained **> 8 weeks** after the most recent CDI LabID Event (or with no previous CDI LabID Event documented) for that patient.

- **Recurrent CDI Assay:** Any CDI LabID Event from a specimen obtained **> 2 weeks** and **≤ 8 weeks** after the most recent CDI LabID Event for that patient.

Will a patient in my facility still be categorized as CO-HCFA if he/she spent time in a nursing home between admissions to my facility?

Although the patient could have spent time at another facility in the time between previous discharge and the new admission, this additional information is not utilized because of burden for searching outside of one's own facility.

Custom fields can be used, if a facility wants to track such information.

LabID Events categorized as CO-HCFA are simply an additional level and subset of the categorized CO events.

What if the patient was admitted with diarrhea, but the stool was not tested for *C. difficile* until day 4, will the Event still be categorized as healthcare facility-onset (HO)?

A LabID Event will be categorized as HO if specimen collection is >3 days after admission to the facility. No exceptions!!

LabID Events are categorized based on the date of specimen collection and the date of admission

Signs and Symptoms are NOT applicable to LabID Event reporting

What if the patient has a history of *C. difficile*, but was retested in my facility >3 days after admission, will the Event still be categorized as healthcare facility-onset (HO)?

A LabID Event will be categorized as HO if specimen collection is >3 days after admission. This is irrespective of the patient having a history of *C. difficile*.

BUT……

A *C. difficile* LabID Event is categorized as Incident or Recurrent based on current specimen collection date and specimen collection date of previous *C. difficile* LabID Event within the same facility

Only incident HO *C. difficile* LabID Event data are shared with CMS!!!

Let's Review
C. difficile LabID Events for FacWideIN

- ✓ **C. diff toxin-positive specimens MUST be monitored throughout all inpatient locations within a facility.** ***Exception: NICUs, SCN, Well Baby Nurseries, and babies in LDRP units are excluded in C. difficile LabID Event reporting only***
- ✓ **All LabID Event(s) MUST be entered whether community-onset (CO) or healthcare facility-onset (HO)**
- ✓ **Only loose stools should be tested for *C. difficile***
- ✓ **A toxin positive loose stool specimen qualifies as a LabID Event if there has not been a previous positive laboratory result for the patient and location within the previous 14 days**

Wait!!

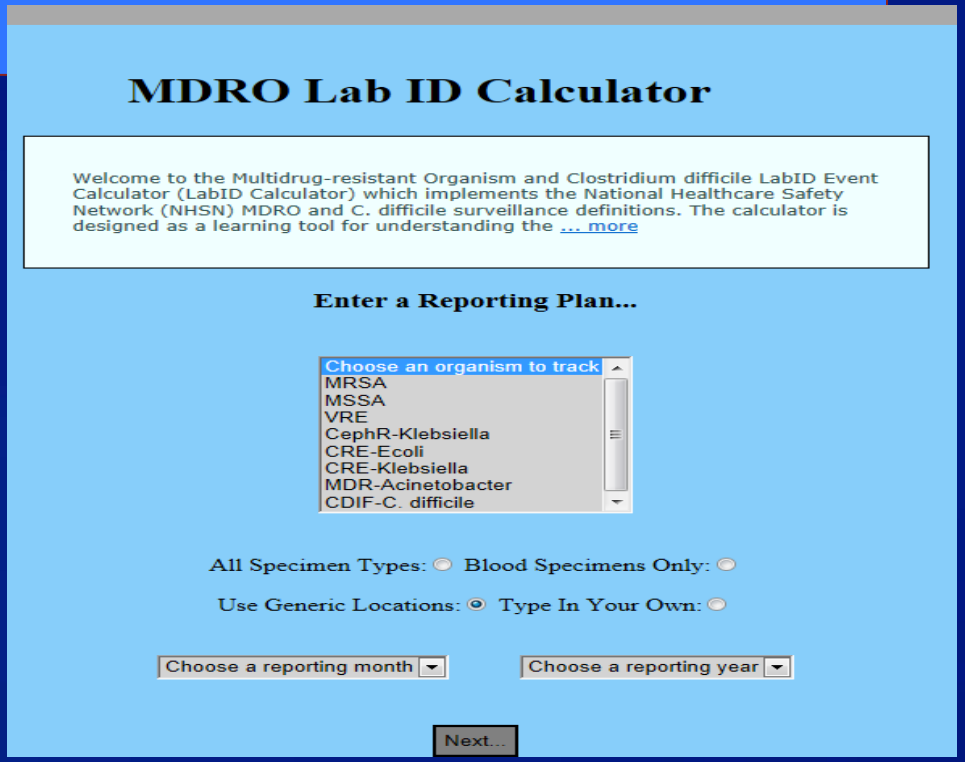
According to the LabID Event protocol for MRSA and *C. difficile*, I must only report to NHSN positive isolates that occur > 14-days per patient, per isolate, per location. Is this correct?

YES

Only non-duplicate LabID Events should be entered into the NHSN application. There must be a full 14-days since the patient's most recent matching positive isolate (MRSA blood; *C. difficile* toxin positive) while in the same location.

LabID Event Calculator

- Available for use with *C. difficile* and MDRO LabID Event reporting
- Aids in decision making around the 14-day rule
- External calculator



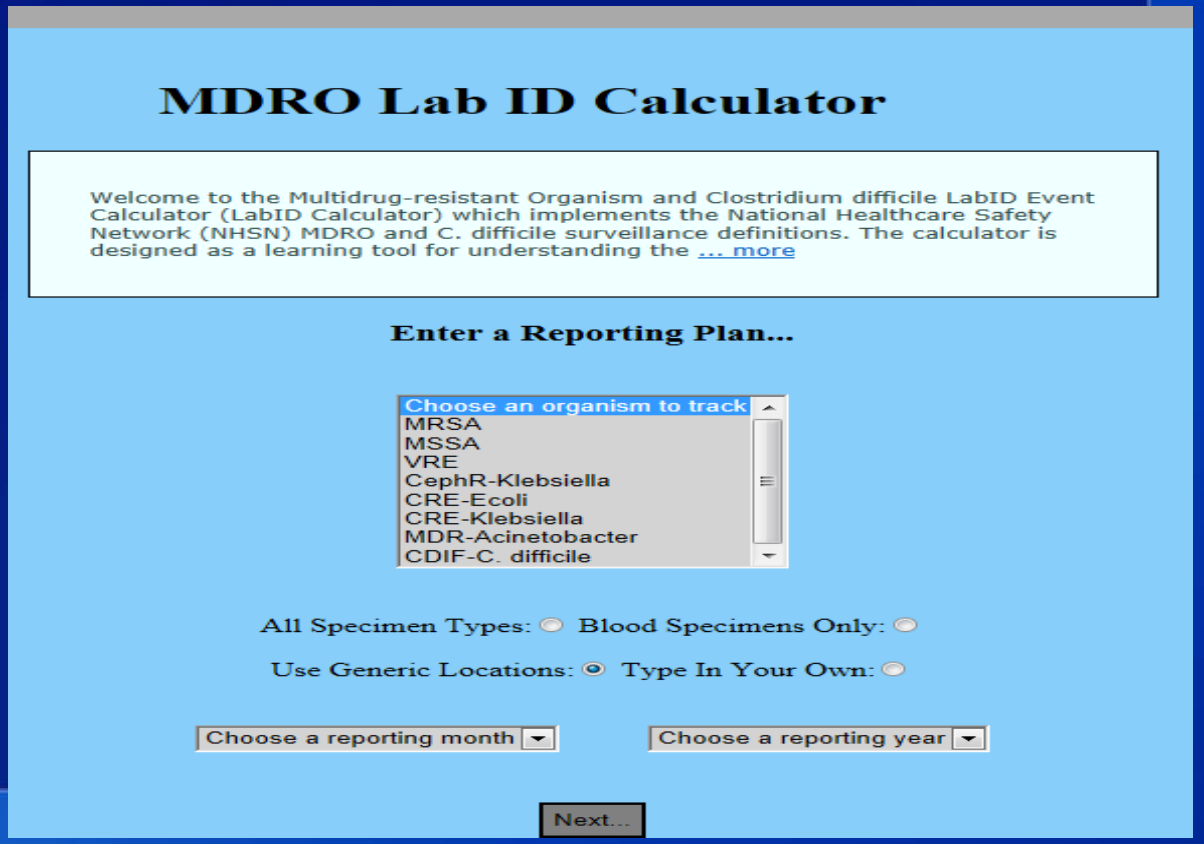
To Begin…

1: Choose Organism

2: Select reporting type (MRSA/MDRO): *ALL specimen Types* or *Blood Specimens Only*

3: Select Generic Locations or Type in Your Own Locations

4: Choose a reporting month and year



MDRO Lab ID Calculator

Reporting Plan:

Reporting month: December, 2013
Location: Facility Wide
Organism: MRSA
Scope: All Specimens

Back to instructions...

Clear Data... | Start Over | Close | Calculate Lab

- Specimen collection date
- Organism
- Specimen Body Site
- Specimen Type
- Location of patient at time of specimen collection.

Date	Positive for...	Specimen Body Site	Specimen Type	Location	Reportable
11/16/2013	...	...	...	...	
11/17/2013	...	...	...	...	
11/18/2013	...	...	...	...	
11/19/2013	...	...	...	...	
11/20/2013	...	...	...	...	
11/21/2013	...	...	...	...	
11/22/2013	...	...	...	...	
11/23/2013	...	...	...	...	
11/24/2013	...	...	...	...	
11/25/2013	...	...	...	...	
11/26/2013	...	...	...	...	
11/27/2013	...	...	...	...	
11/28/2013	...	...	...	...	
11/29/2013	...	...	...	...	
11/30/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	UNK
12/1/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	ARTERY -Artery sample	BURN ICU	YES
12/2/2013	...	...	...	...	
12/3/2013	...	...	...	...	
12/4/2013	...	...	...	...	
12/5/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/6/2013	...	...	...	...	
12/7/2013	...	...	...	...	
12/8/2013	...	...	...	...	
12/9/2013	...	...	...	...	
12/10/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/11/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	CARDIAC ICU	YES
12/12/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/13/2013	...	...	...	...	

MDRO Lab ID Calculator

Reporting Plan:

Reporting month: December, 2013
Location: Facility Wide
Organism: MRSA
Scope: All Specimens

Back to instructions...

Clear Data... | Start Over | Close | Calculate Lab ID

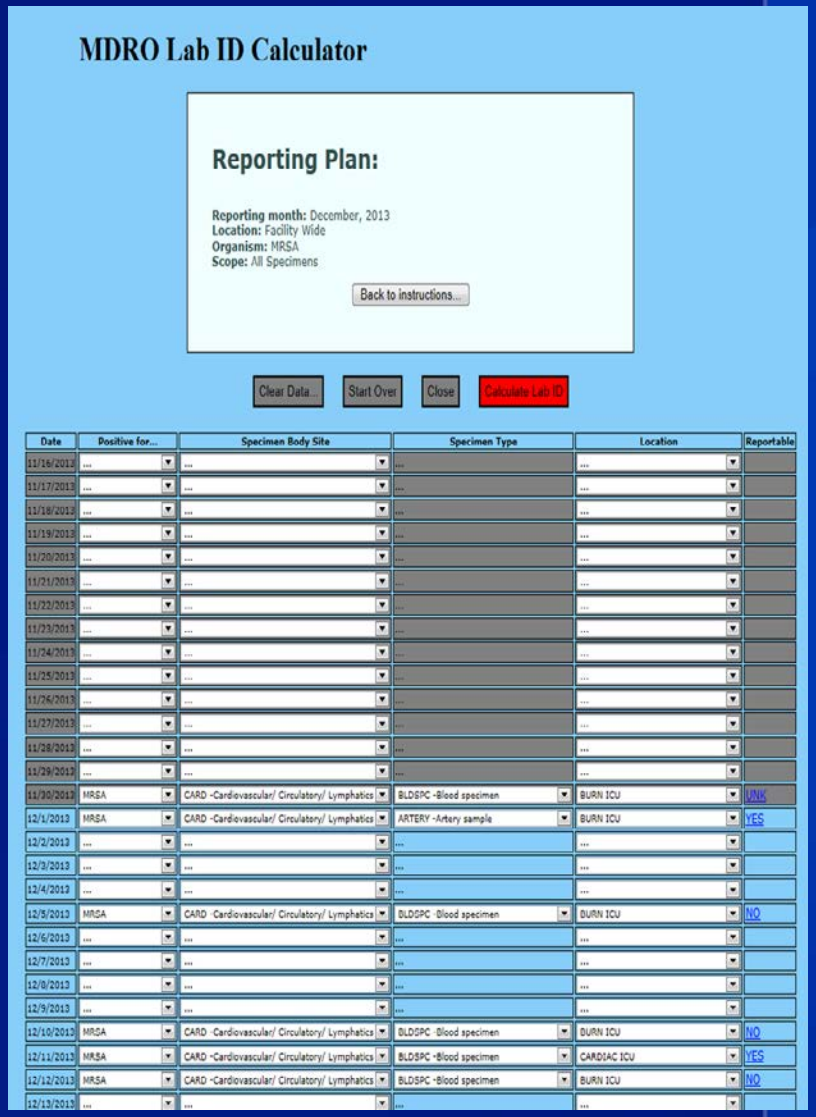
- Once all applicable specimens have been entered, click **Calculate Lab ID**
- Review Reportable column for validation of reportable LabID Events

Date	Positive for...	Specimen Body Site	Specimen Type	Location	Reportable
11/16/2013	...	...	...	...	
11/17/2013	...	...	...	...	
11/18/2013	...	...	...	...	
11/19/2013	...	...	...	...	
11/20/2013	...	...	...	...	
11/21/2013	...	...	...	...	
11/22/2013	...	...	...	...	
11/23/2013	...	...	...	...	
11/24/2013	...	...	...	...	
11/25/2013	...	...	...	...	
11/26/2013	...	...	...	...	
11/27/2013	...	...	...	...	
11/28/2013	...	...	...	...	
11/29/2013	...	...	...	...	
11/30/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	UNK
12/1/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	ARTERY -Artery sample	BURN ICU	YES
12/2/2013	...	...	...	...	
12/3/2013	...	...	...	...	
12/4/2013	...	...	...	...	
12/5/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/6/2013	...	...	...	...	
12/7/2013	...	...	...	...	
12/8/2013	...	...	...	...	
12/9/2013	...	...	...	...	
12/10/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/11/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	CARDIAC ICU	YES
12/12/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/13/2013	...	...	...	...	

Reportable LabID Events

LabID Event Calculator

- Grayed dates are outside of the selected reporting month.
- Only enter positive lab results for applicable specimens in the grayed dates to calculate the 14 day rule. ***NOTE****: A determination is not provided for lab results entered into the grayed dates since these are outside of the selected reporting month.*
- You may change values, and recalculate as many times as you wish for a given reporting plan.
- To get an explanation of a determination, click on the YES/NO/UNK values that will appear in the right column.
- If you need to enter more than one lab result on a calendar day, click on the applicable date to generate a new row.



Date	Positive for...	Specimen Body Site	Specimen Type	Location	Reportable
11/16/2013	...	...	...	...	
11/17/2013	...	...	...	...	
11/18/2013	...	...	...	...	
11/19/2013	...	...	...	...	
11/20/2013	...	...	...	...	
11/21/2013	...	...	...	...	
11/22/2013	...	...	...	...	
11/23/2013	...	...	...	...	
11/24/2013	...	...	...	...	
11/25/2013	...	...	...	...	
11/26/2013	...	...	...	...	
11/27/2013	...	...	...	...	
11/28/2013	...	...	...	...	
11/29/2013	...	...	...	...	
11/30/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	UNK
12/1/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	ARTERY -Artery sample	BURN ICU	YES
12/2/2013	...	...	...	...	
12/3/2013	...	...	...	...	
12/4/2013	...	...	...	...	
12/5/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/6/2013	...	...	...	...	
12/7/2013	...	...	...	...	
12/8/2013	...	...	...	...	
12/9/2013	...	...	...	...	
12/10/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/11/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	CARDIAC ICU	YES
12/12/2013	MRSA	CARD -Cardiovascular/ Circulatory/ Lymphatics	BLDSPC -Blood specimen	BURN ICU	NO
12/13/2013	...	...	...	...	

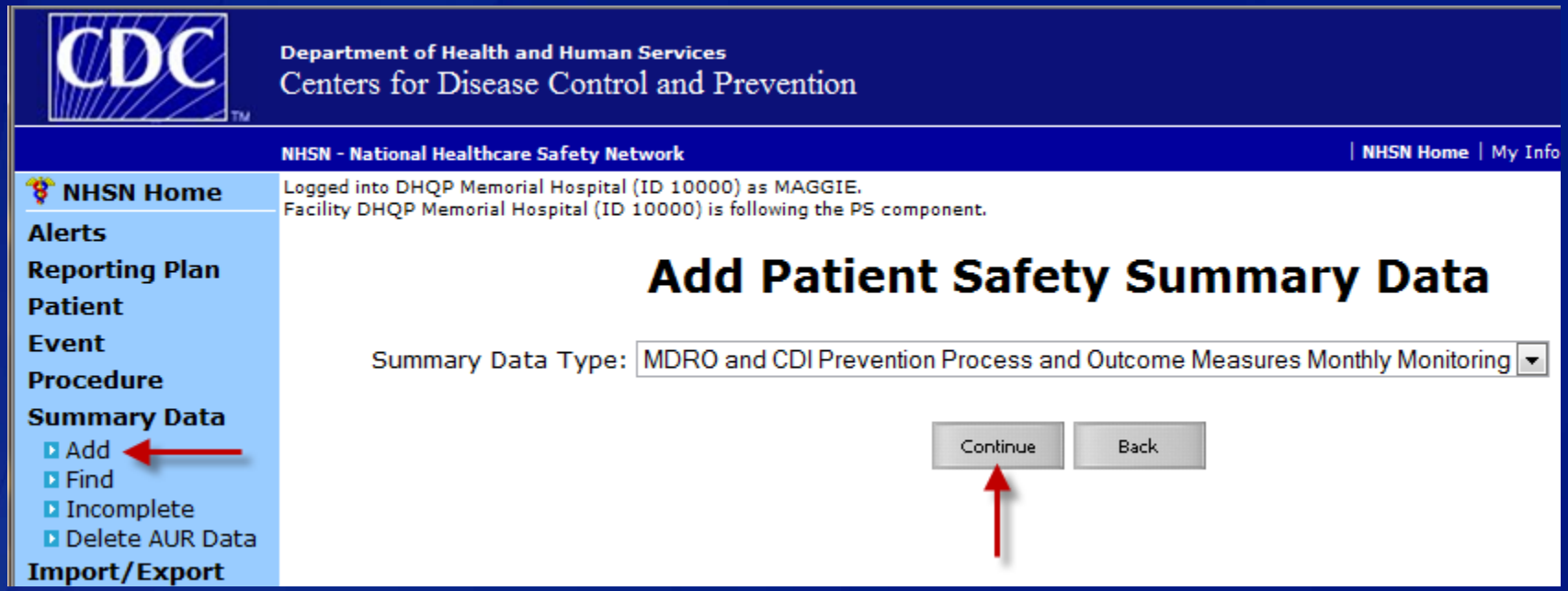
"CHECKLIST"
For Facility-wide Inpatient MRSA Bacteremia & *C. difficile* LabID Event Reporting

- ✓ Review location options and map inpatient locations in NHSN as necessary.
- ✓ Review Monthly Reporting Plan(s) and update as necessary.
- ✓ Identify and enter all MRSA bacteremia and *C. difficile* LabID events into NHSN by location.
- ❑ **Enter FacWideIN denominator data for each month under surveillance.**
- ❑ Resolve "Alerts", if applicable.


LabID Event Reporting
Denominator Data

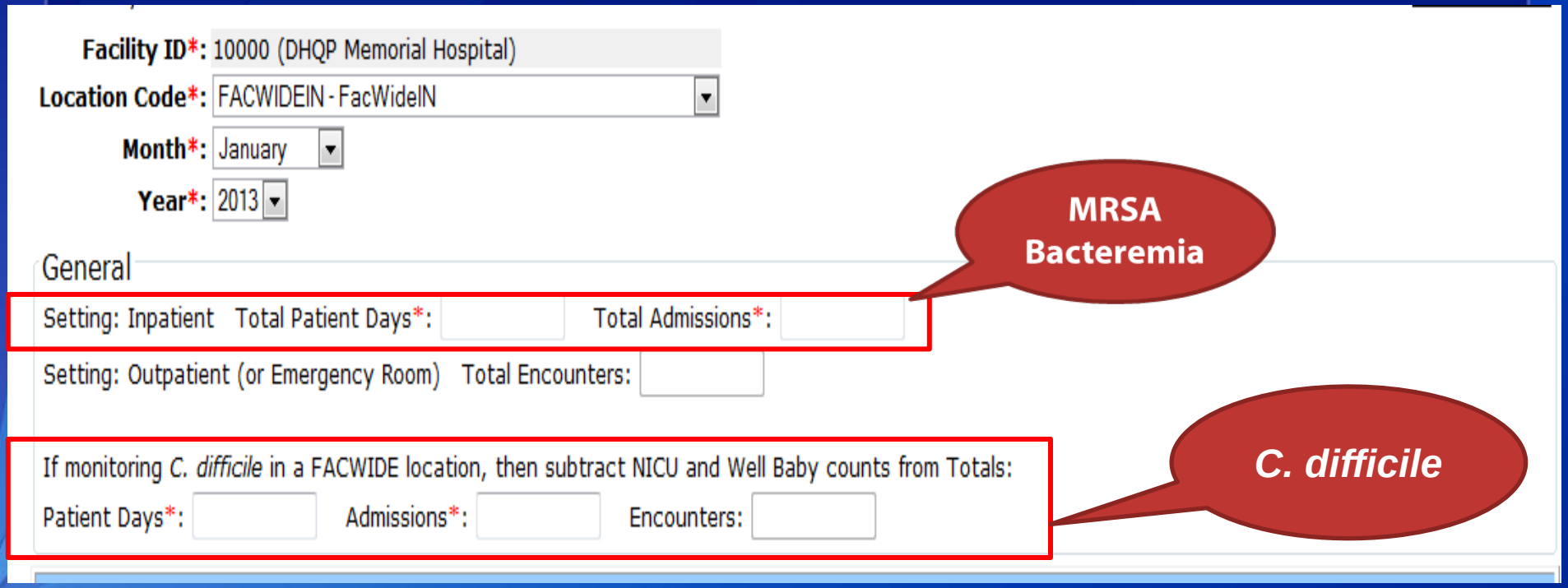
Denominator Data

- Denominator data must be entered each month
- Go to Summary Data > Add
- Select “MDRO/CDI … “option as summary data type



Denominator Data

- Select “FACWIDEIN” as the Location for facility-wide inpatient reporting. **NOTE:** FACWIDEIN location is automatically available in NHSN…this location does not have to be set up
- Select appropriate month and year
- Four summary data fields will become required for FacWideIN



Denominator Data

Facility ID*: 10000 (DHQP Memorial Hospital)

Location Code*: FACWIDEIN - FacWideIN

Month*: January

Year*: 2013

General

Setting: Inpatient Total Patient Days*: Total Admissions*:

Setting: Outpatient (or Emergency Room) Total Encounters:

If monitoring *C. difficile* in a FACWIDE location, then subtract NICU and Well Baby counts from Totals:

Patient Days*: Admissions*: Encounters:

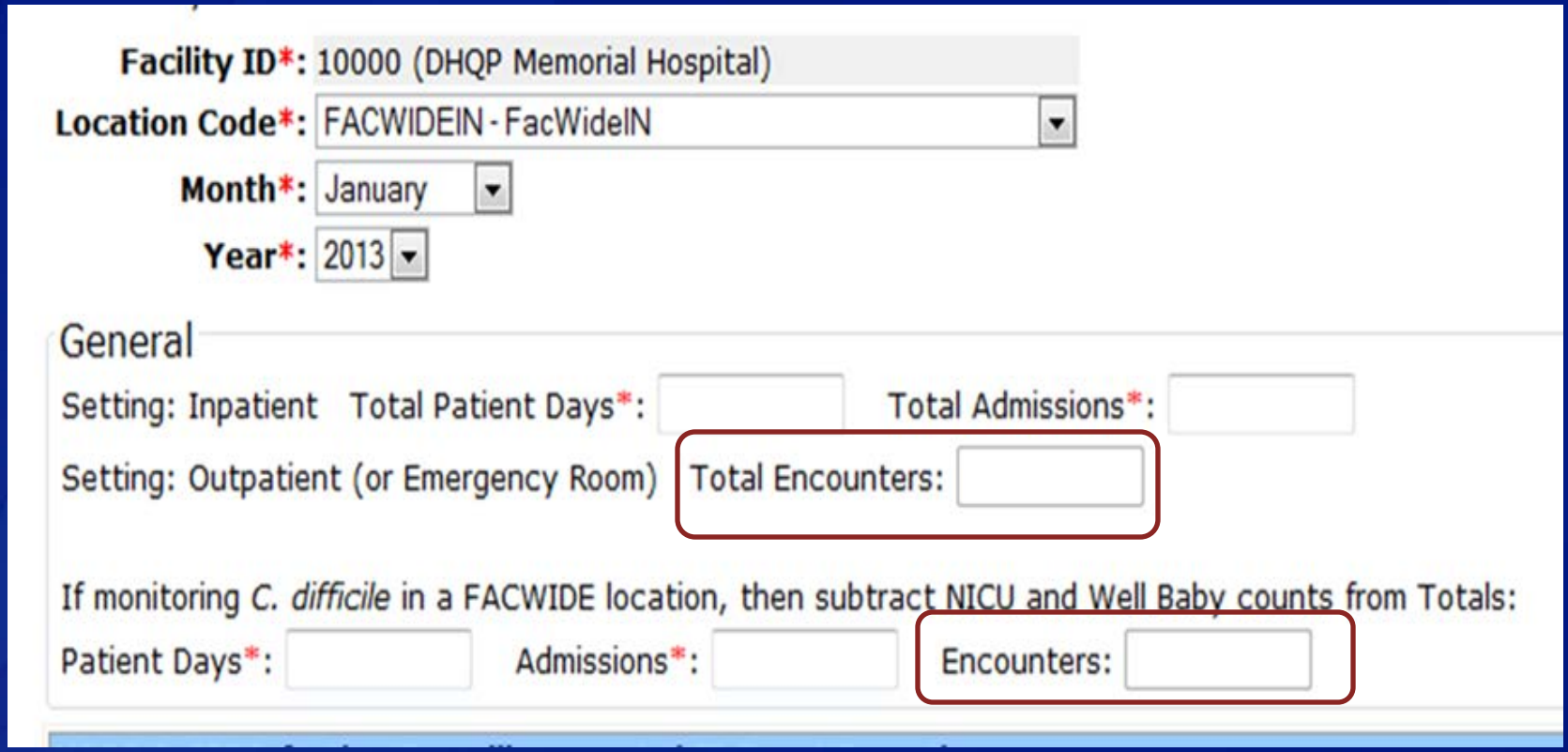
MDRO & CDI Infection Surveillance or LabID Event Reporting

Specific Organism Type	MRSA	Report No Events	VRE						*DR-obacter	Report No Events	*C. difficile*	Report No Events
Infection Surveillance	☐	☐	☐							☐	☐	☐
LabID Event (All specimens)	☐	☐	☐							☐	* ☑	☐
LabID Event (Blood specimens only)	* ☑	☐	☐							☐		

These boxes will auto-check for each event you are following "in-plan". If these boxes are <u>not</u> checked automatically, your data are not in-plan and will not be submitted to CMS!

What do I put in the box labeled “Encounters” on the denominator form?

"Encounters" refers to the number of patient encounters/visits for <u>outpatient</u> LabID Event reporting only. It is not used for inpatient denominator counts, therefore, not used for FacWideIN reporting



"CHECKLIST"
For Facility-wide Inpatient MRSA Bacteremia & *C. difficile* LabID Event Reporting

- ✓ Review location options and map inpatient locations in NHSN as necessary.
- ✓ Review Monthly Reporting Plan(s) and update as necessary.
- ✓ Identify and enter all MRSA bacteremia and *C. difficile* LabID events into NHSN by location.
- ✓ Enter FacWideIN denominator data for each month under surveillance.
- ❑ **Resolve "Alerts", if applicable.**

“Report No Events”

- **Facilities must appropriately “*Report No Events*” for those months for which no events of each type under surveillance were identified.**
- **If no LabID Events have been reported and this box is not checked, your data will <u>not</u> be submitted to CMS.**

“Report No Events”

- On the MDRO and CDI Module summary data form, checkboxes for “*Report No Events*” are found underneath the patient day and admission count fields.
- If LabID events have already been reported for the specific organism, the “*Report No Events*” box will be disabled, preventing it from being checked.
- NOTE: If you identify and enter LabID Events for an organism after checking “*Report No Events*”, the “*Report No Events*” box will automatically uncheck.

Denominator Data – *Report No Events*

Email help desk: nhsn@cdc.gov

NHSN website:
http://www.cdc.gov/nhsn/

Case Studies

Case 1
Man vs. Dog

- 3/1: 22 year old male admitted to 5 W medical unit after a panic attack following a dog bite from the family Yorkie. Pt. has history of frequent antibiotic use for chronic UTIs.
- 3/2: Wound draining small amounts of clear drainage. Pt. complains of lower abdominal cramps, relieved with medication. Panic attacks decreased to 3-4 per day.
- 3/3: Later that day, pt. has fever of $38.2^{0}C$ and complains of worsening lower abdominal pain. BM with loose unformed stool. Pt. moved to 3 E to accommodate frequent bathroom visits.

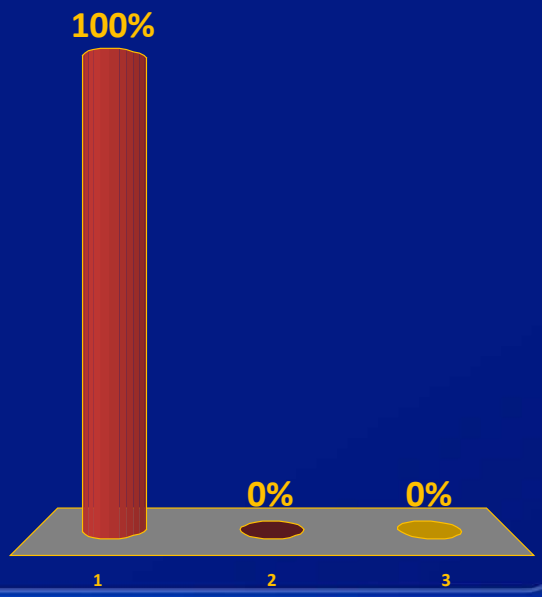
Case 1
Man vs. Dog

- 3/4: While on 3E, pt. continues to complain of lower abdominal pain and loose stools. Over the course of the day, the pt. had several loose stools.
- 3/5: Unformed stool tested positive for C. difficile toxin.

Case 1

For **FacWideIN** LabID reporting, should this be entered as a *C. difficile* LabID Event?

1. No. His symptoms started on admission to the hospital.
2. ✓ Yes. This is the first toxin positive *C. difficile* isolate collected for this patient and location (*no previous positive within 14 days for location*).
3. No. Enter this as a GI Event for this patient.



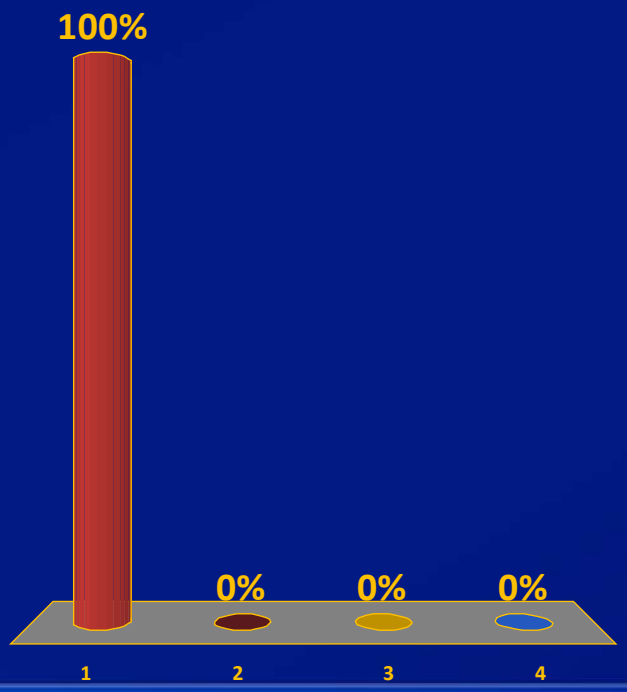
Case 1

#2..YES- This is a *C. difficile* LabID Event and should be entered into NHSN

A toxin positive C. *difficile* stool specimen for a patient in a location with no prior C. *difficile* specimen result within 14 days for the patient and the location

Case 1
What Location is the LabID Event Attributed?

1. ICU
2. 3E
3. Lab
4. FacWideIN



Case 1
#2…3E

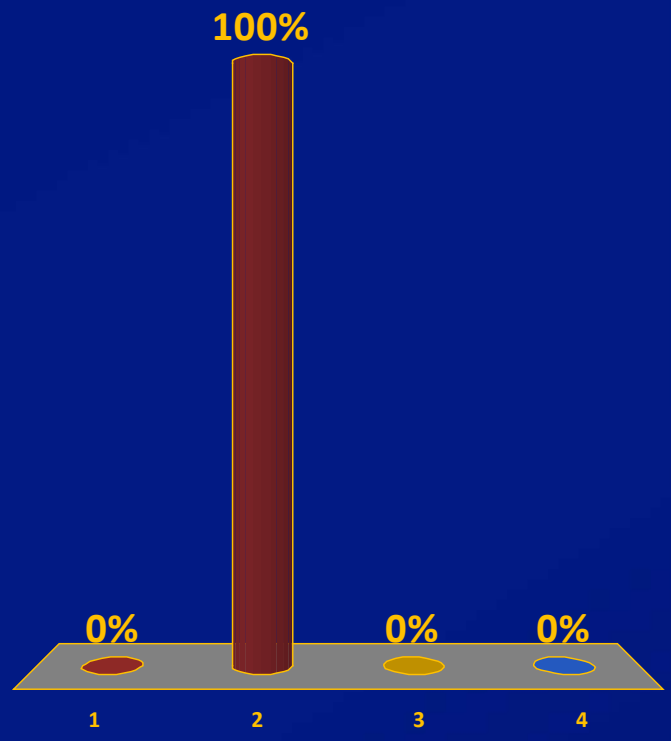
Location attribution is based solely on where the patient was assigned when the specimen was collected. There is no thought process or subjective decisions allowed for location attribution for LabID event reporting.

NHSN “transfer rule” does **NOT apply for LabID Events

Case 1
How Will this Event be Categorized?

(Hint: admission on 3/1; specimen collection on 3/4)

1. Community-Onset (CO)
2. Healthcare Facility-Onset (HO)
3. Community-Onset Healthcare Facility-Associated (CO-HCFA)
4. As funny



#2….Healthcare Facility-Onset (HO)

REMEMBER:

LabID Events are categorized based on the date of specimen collection and the date of admission.

Case 2
Man vs. Buffet
or is it???

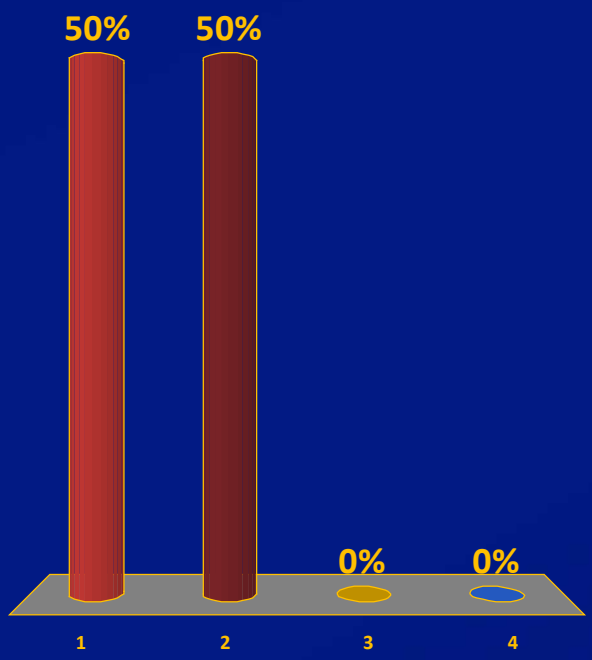
3/1: Pt. presents to the emergency department (ED) with complaints of diarrhea and lower abdominal pain for the past two days. Pt. states that he has been on antibiotics for 5 days for treatment of an UTI, but he also ate fresh fruit from a buffet 3 days ago and believes that he has food poisoning. Pt. is hypotensive and has poor skin turgor. A stool specimen collected in the ED tests toxin positive for C. *difficile*; negative for Salmonella and other enteric pathogens.

3/1: Patient admitted to 2S medical unit for intravenous hydrations and medical management.

Case 2

For FacWide**IN** LabID Event reporting, can this result be entered as a LabID Event and if so, what location would be entered?

1. No. ED is an outpatient location and I am only monitoring inpatient locations.
2. Yes. Location would be the ED since specimen was collected there.
3. Yes. Location would be 2S, the admitting location.
4. Yes. Location would be FacWideIN.



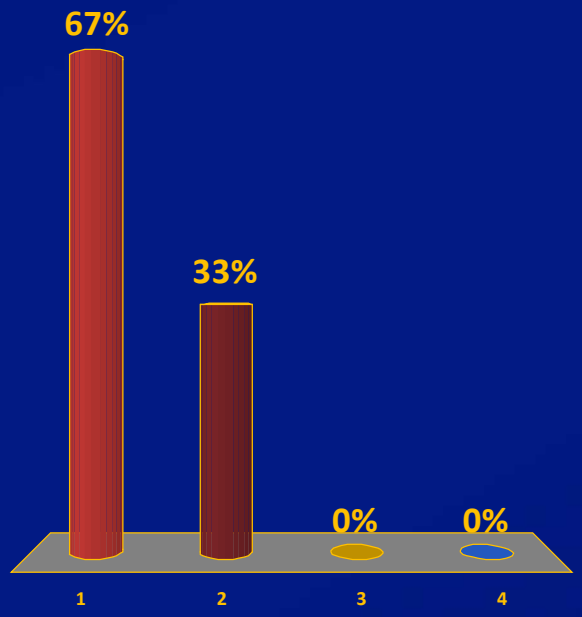
Case 2
#3…YES, 2S

If a specimen collected in the facility's emergency department is positive for *C. difficile*, and the patient is subsequently admitted into an inpatient unit on the SAME calendar day, then that specimen can be reported as the first specimen for the patient in that ADMITTING INPATIENT LOCATION

Case 2

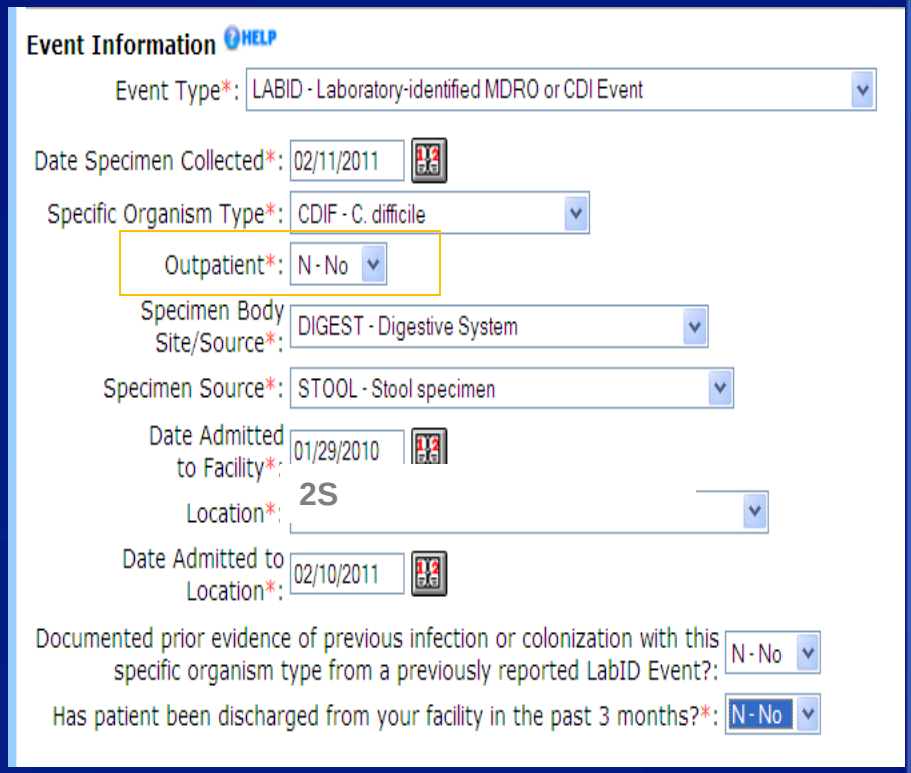
What if you are participating in both FacWide**IN** and ED location specific reporting?

1. Report the positive CDI LabID Event separately, once for ED and again for 2S.
2. Report only as FacWideIN.
3. Report only as FacWideOUT.
4. Toss a coin to make location selection.



Case 2
#1..Report in both places

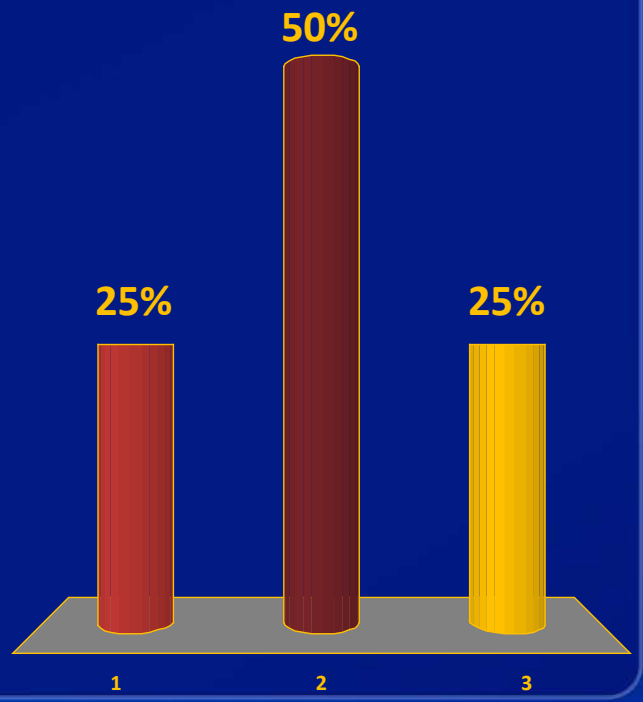
If your monthly reporting plan includes both FacWide**IN** and ED location specific reporting, then you should report the positive CDI LabID Event separately, once as 2S (*select NO for outpatient*) and then again for ED (*select YES for outpatient*).



Case 2

What if the specimen was collected in the ED on 3/1/14 and the patient was admitted, but he was not physically moved into an inpatient unit until the early morning of 3/2/14?

1. Change the specimen collection date to match the physical admission date so the application will accept the LabID Events
2. Do not enter the LabID Event for FacWide**IN** reporting since the specimen collection and physical admission dates are different
3. Enter the specimen as a LabID Event since the dates match in the computer.



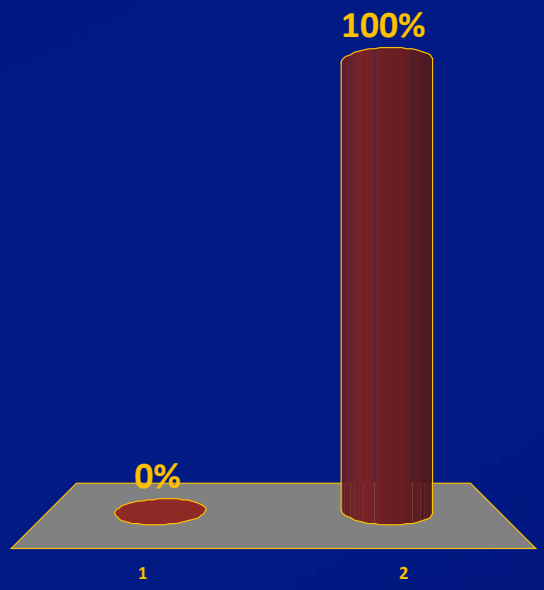
Case 3

- 2/15: 85 year old patient admitted to inpatient unit, 3E, from rehab facility. The patient was discharged from your facility 2-weeks ago after spending 3 weeks in the ICU after a sky diving incident.
- Upon admission to 3E, patient is noted to have foul loose stools.
- 2/16: After three episodes of loose stools over the course of 24 hours, an unformed specimen was collected and tested positive for C. *difficile* toxin.

Case 3

For FacWide**IN** LabID reporting Should this be entered into NHSN as a LabID Event?

1. YES. Specimen was collected from 3E inpatient location.
2. NO. This infection belongs to the Hospice.



Case 3

YES… This is a CDI LabID Event and should be entered into NHSN

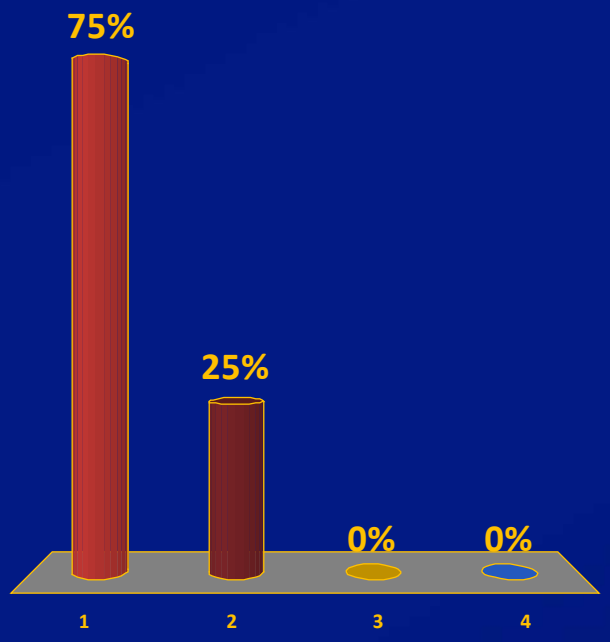
A toxin positive C. *difficile* stool specimen for a patient in a location with no prior C. *difficile* specimen result within 14 days for the patient and the location. Both community-onset and healthcare-onset events should be reported.

Recommend the use of "Optional Field" to document history of rehab for internal tracking purposes

Case 3

How will NHSN Categorize the CDI Event?

1. Community-onset (CO)
2. Healthcare-Facility onset (HO)
3. Community-Onset Healthcare Facility-Associated (CO-HCFA)
4. NHSN will not categorize the event, the user will need to make the decision



Case 3

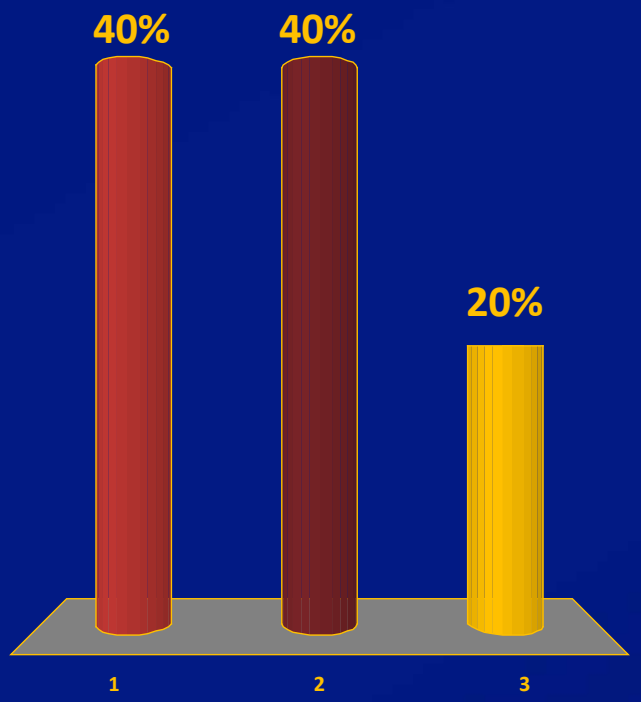
#3.. Community-Onset Healthcare Facility-Associated (CO-HCFA)

This patient was previously discharged from your facility ≤ 4 weeks prior to current date of stool specimen collection and the stool specimen was collected less than 4 days after admission to the facility

Case 3

What categorization would the application assign if the stool specimen was collected 4 days after admission to the hospital?

1. Community-onset (CO) since the patient was admitted with symptoms of foul stool
2. Healthcare-Facility onset (HO)
3. Community-Onset Healthcare Facility-Associated (CO-HCFA) since the patient was admitted from another healthcare facility



Case 3

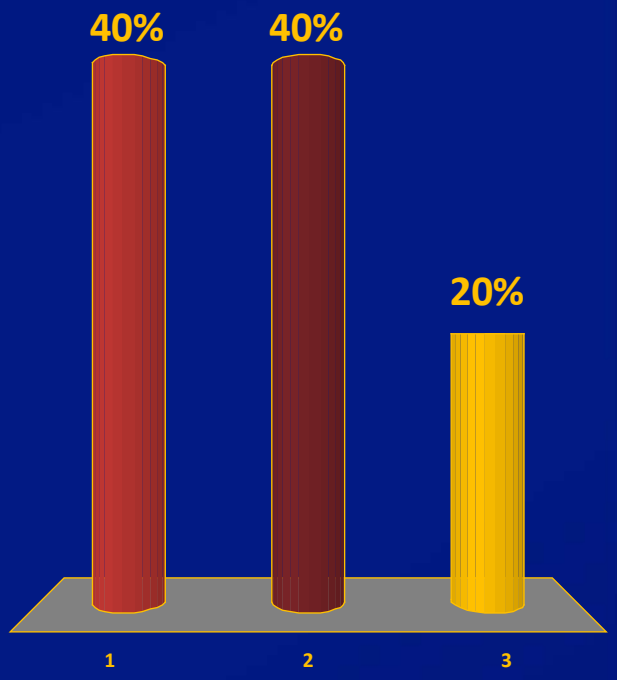
#2..Healthcare Facility Onset (HO)

Healthcare Facility Onset (HO) since the stool was collected more than 3 days after admission.

Case 4

What if a patient with no previous admission to your facility presents with symptoms of diarrhea and fever on admission, but the *C. difficile* toxin was negative on admission and subsequently positive on day 4 of admission?

1. I can over-ride NHSN and categorize the event as community-onset since patient was symptomatic on admission.
2. NHSN will categorize as community-onset (CO).
3. NHSN will categorize as healthcare facility-onset (HO)



Case 4

#3..Healthcare-Onset

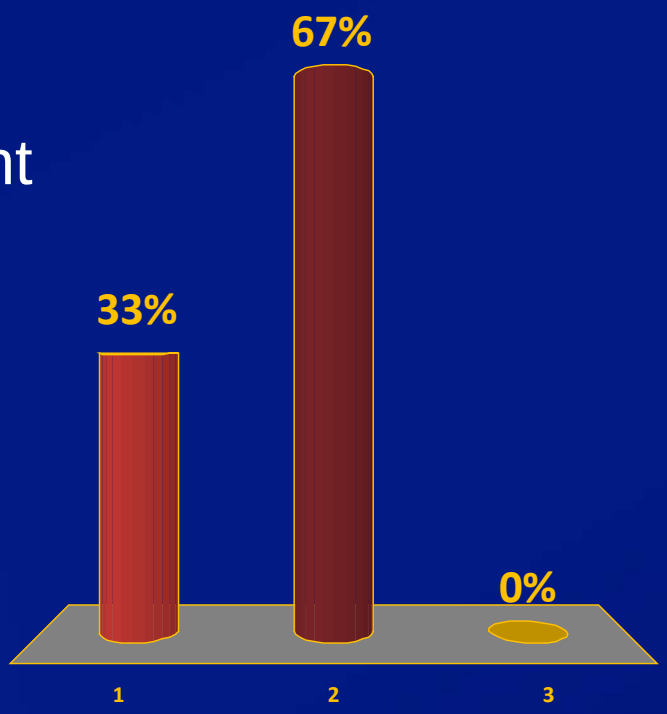
NHSN would still categorize the event as healthcare-onset since the first positive stool specimen was collected on or after day 4 of admission

**Lab ID Event reporting is a proxy measure to lighten the load of surveillance, but this reduction in burden is traded off with a decreased specificity as it relates to true infection and attribution

Case 5

If your hospital is participating in the CMS Inpatient Quality Reporting (IQR) Program, which locations must you select when setting up your monthly reporting plan for *C. difficile* LabID Event reporting?

1. ✓ FacWideIN
2. Emergency department, outpatient surgery, and affiliated physician offices.
3. FacWideOUT, which includes all outpatient locations affiliated with the facility.



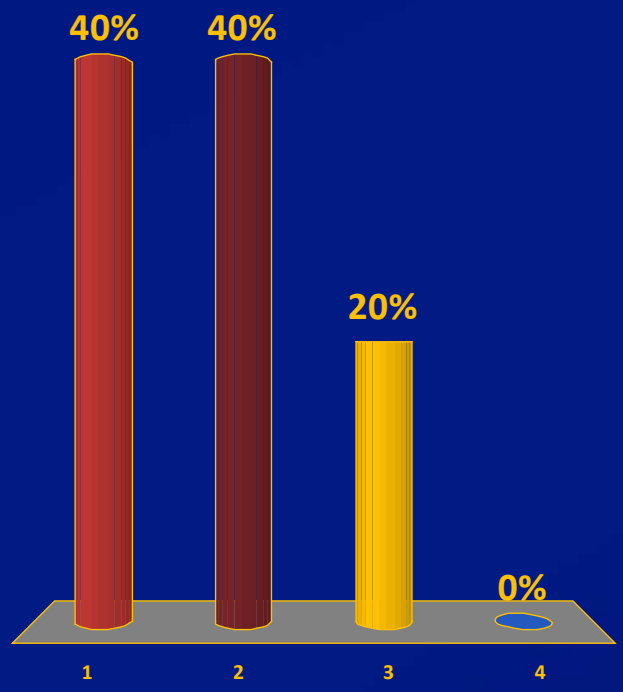
Case 5
#1…..FacWideIN

CMS requires acute care facilities to report C. *difficile* LabID Events for all inpatient locations (FacWideIN) where stool specimens may be collected. This excludes locations known to predominantly house babies.

Case 6

What monthly denominator data is entered for *C. difficile* LabID Event reporting for FacWideIN?

1. Patient admissions by each unit and total patient days by unit.
2. *C. difficile* patient days and admissions for all inpatient locations minus NICU, SCN, and Well Baby location counts, including babies in LDRP locations.
3. Total patient days and total admissions for all inpatient locations.
4. Total patient encounters.



Case 6

#2....Patient days and admissions for all inpatient locations minus NICU, SCN, and Well Baby locations

- Reporting Plan
- Patient
- Event
- Procedure
- Summary Data
  - Add
  - Find
  - Incomplete
- Import/Export
- Analysis
- Surveys
- Users
- Facility
- Group
- Log Out

Facility DHQP Memorial Hospital (ID 10000) is following the PS component.

MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring

HELP

Mandatory fields marked with *

Print PDF Form

Facility ID*: 10000 (DHQP Memorial Hospital)
Location Code*: FACWIDEIN - FacWideIN
Month*: January
Year*: 2012

General

Setting: Inpatient Total Patient Days: Total Admissions:

Setting: Outpatient (or Emergency Room) Total Encounters:

If monitoring *C. difficile* in a FACWIDE location, then subtract NICU and Well Baby counts from Totals:

Patient Days*: Admissions*: Encounters:

MDRO & CDI Infection Surveillance or LabID Event Reporting

Specific Organism Type	MRSA	Report No Events	VRE	Report No Events	*CephR-Klebsiella*	Report No Events	*CRE-Ecoli*	Report No Events	*CRE-Klebsiella*	Report No Events	*MDR-Acinetobacter*	Report No Events	*C. difficile*	Report No Events
Infection Surveillance	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
LabID Event (All specimens)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐
LabID Event (Blood	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

Case 7

- 6/15: 90 year old patient admitted from the emergency department (ED) to ICU following a pogo stick accident. A Foley and central line inserted and patient scheduled for emergent surgery for pelvic fracture. Pt. with multiple lacerations.
- 6/16: Pt. spikes a fever of 101^0F and urine draining cloudy drainage in bedside bag. A urine culture is collected.
- 6/18: Urine culture results are positive for *E. coli* and MRSA. Antibiotic treatment begun.

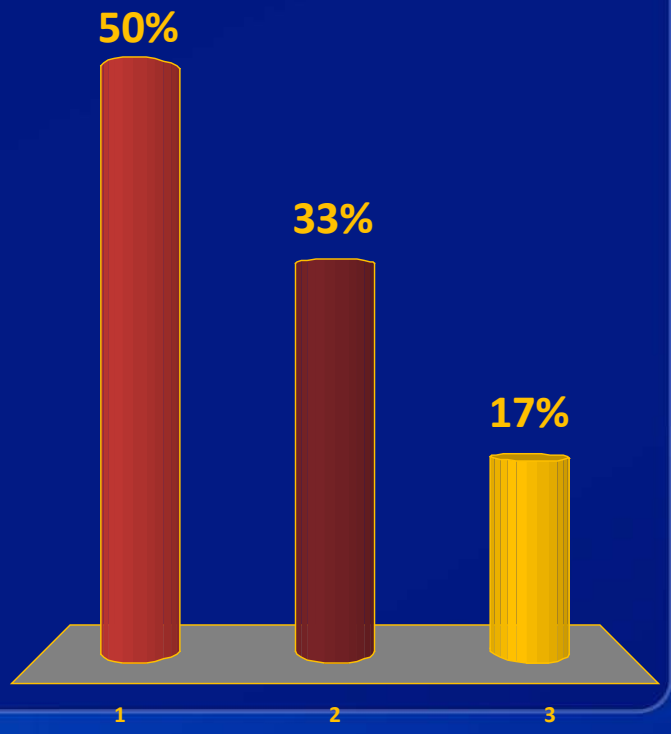
Case 7

- 6/21: Patient continues to have fever of 101.4^{0}F. Blood cultures collected from peripheral IV site.
- 6/22: Two of two blood cultures are positive for MRSA.

Case 7

Since your facility participates in MRSA bacteremia LabID Event Reporting for FacWide**IN**, would you report this positive blood culture as a LabID Event?

1. No. Since the patient already had a positive urine culture with MRSA for this month and location, the MRSA blood is considered a duplicate.
2. Yes. This is considered a unique blood source.
3. No. This is a CLABSI!!



Case 7

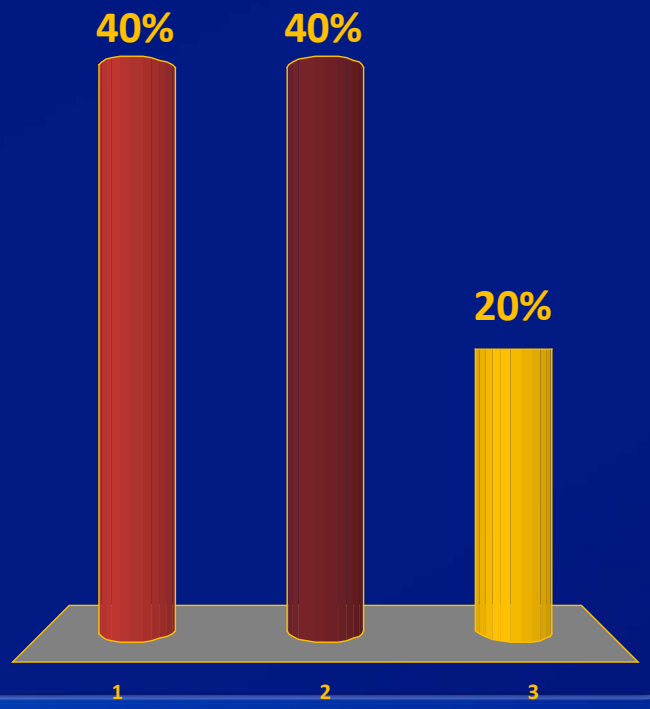
YES

This is considered a MRSA bacteremia LabID Event since the patient has no prior positive blood culture for MRSA in this location in ≤ 2 weeks

Case 7

What if the patient had a previous positive MRSA blood culture 3 days prior to this culture while in the same location (ICU)?

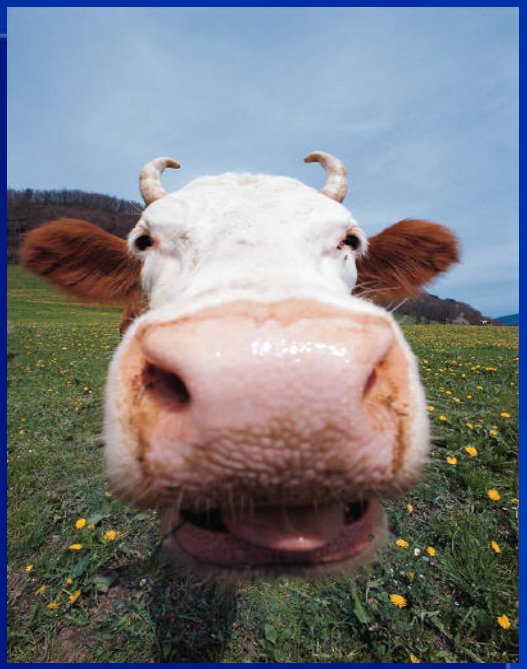
1. This would be a duplicate MRSA isolate and NOT a MRSA bacteremia LabID Event.
2. I would report as a MRSA bacteremia LabID Event.
3. I would report as an Infection Surveillance Event .



Case 7

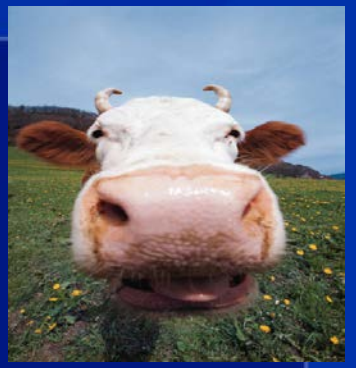
A prior + MRSA blood culture result in ≤ 2 weeks from same patient and same location (including across calendar month) is considered a duplicate MRSA isolate and should NOT be reported as a LabID Event

Case 8



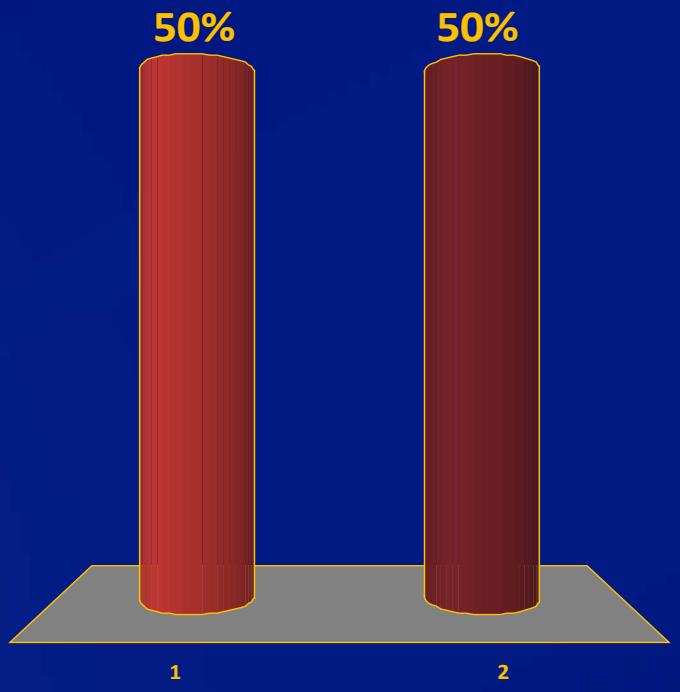
6/1: Mr. Nasal, a local nursing home resident, is admitted to the ICU with a stage 4 sacral ulcer. Upon admission into the ICU, an active nasal screen tested positive for MRSA. Blood cultures were also collected upon admission to the ICU.

Case 8

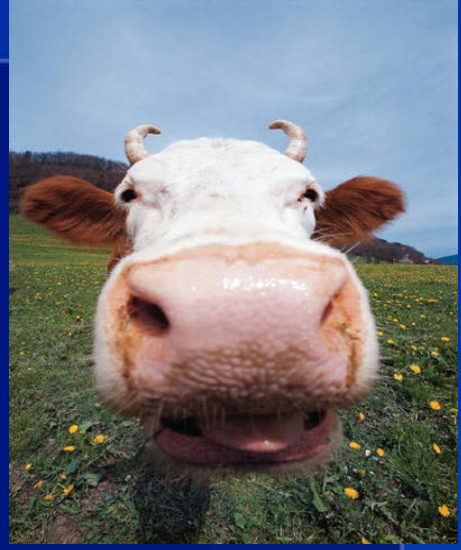


Should this positive MRSA nasal screen be entered into NHSN as a MRSA LabID Event?

1. YES.
2. NO.



Case 8



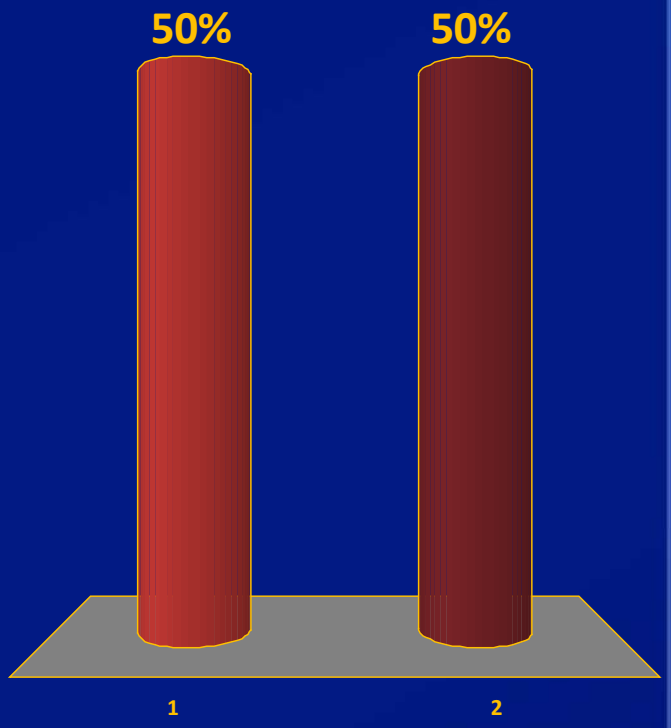
NO

MDRO/MRSA LabID Event Reporting EXCLUDES tests related to active surveillance testing

Case 8

What if the blood culture also tested positive for MRSA?

1. NO. I would not consider this to be a MDRO LabID Event since the patient had a MRSA positive nasal screen.
2. YES. Since the blood culture was obtained for clinical decision making, I would report this as a MRSA bacteremia LabID Event.



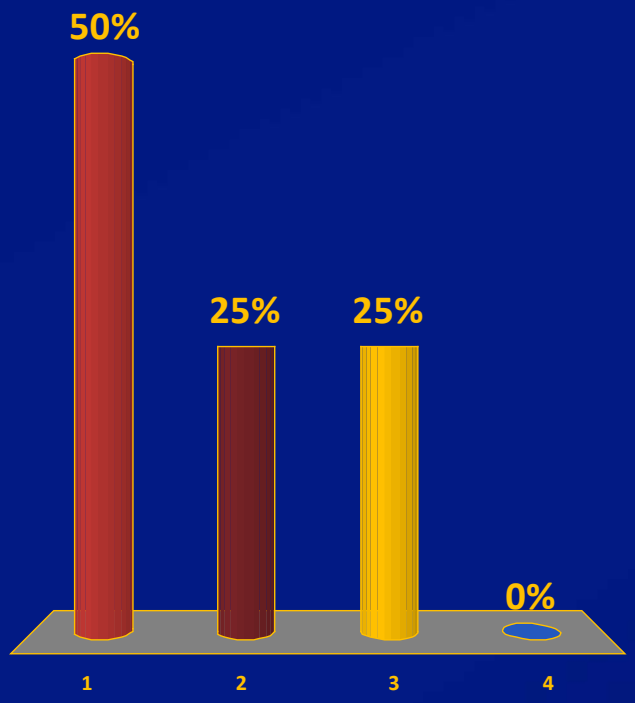
Case 8

Since this was the first positive MRSA blood culture for this patient and location (ICU), this would be considered a MRSA Bacteremia LabID Event.

Case 9

What denominator data is entered for MRSA Bacteremia LabID Event Monitoring for FacWideIN?

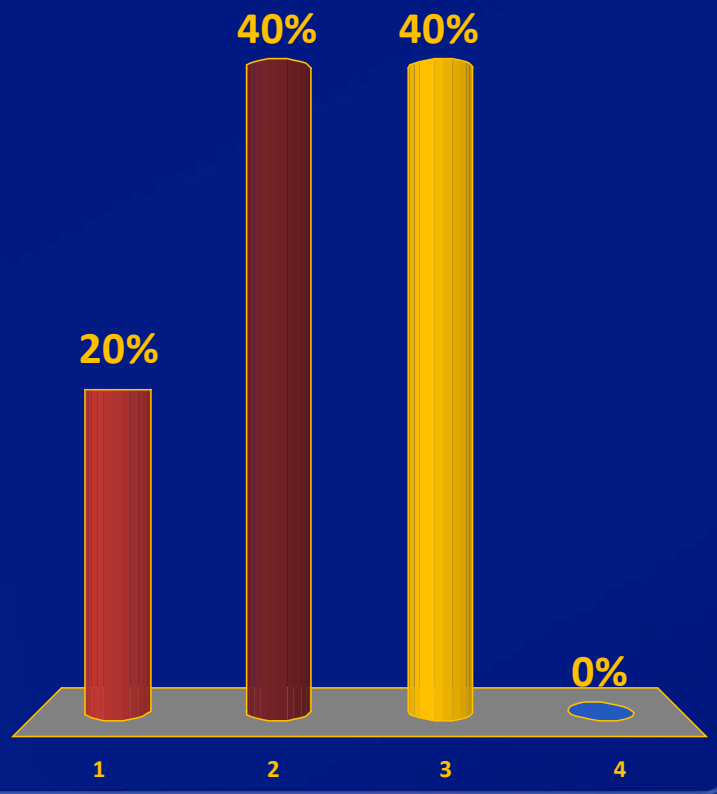
1. Total Patient Admissions by each unit and Total Patient Days by unit.
2. Patient Days and Admissions for all inpatient locations minus NICU and Well Baby location counts (at facility-wide level).
3. Total Patient Days and Total Admissions for all inpatient locations (at facility-wide level).
4. Total Patient Encounters.



Case 10

If your hospital is participating in the CMS Inpatient Quality Reporting (IQR) Program, which locations must you include in your monthly reporting plan for MRSA Bacteremia LabID Event reporting?

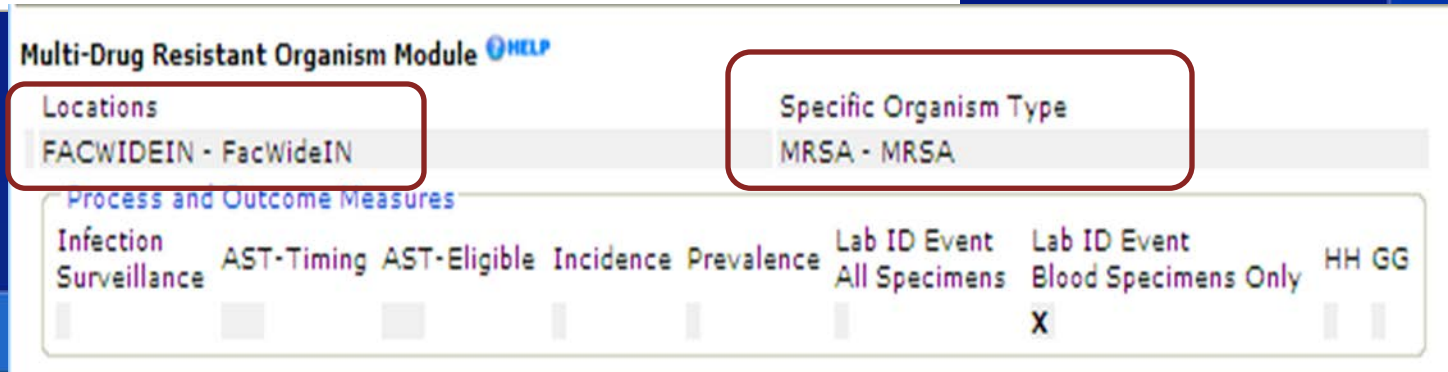
1. ICU, NICU, medical-surgical units, emergency department, oncology.
2. FacWideIN, which includes all inpatient locations.
3. FacWideIN, which includes all inpatient locations, except no monitoring in NICU and Well Baby locations.
4. FacWideOUT, which includes all outpatient locations affiliated with the facility.



Case 10

#2…..FacWideIN

Acute care hospital reporting to CMS via NHSN requires to report MRSA Bacteremia LabID Events for all inpatient locations at the facility-wide inpatient level

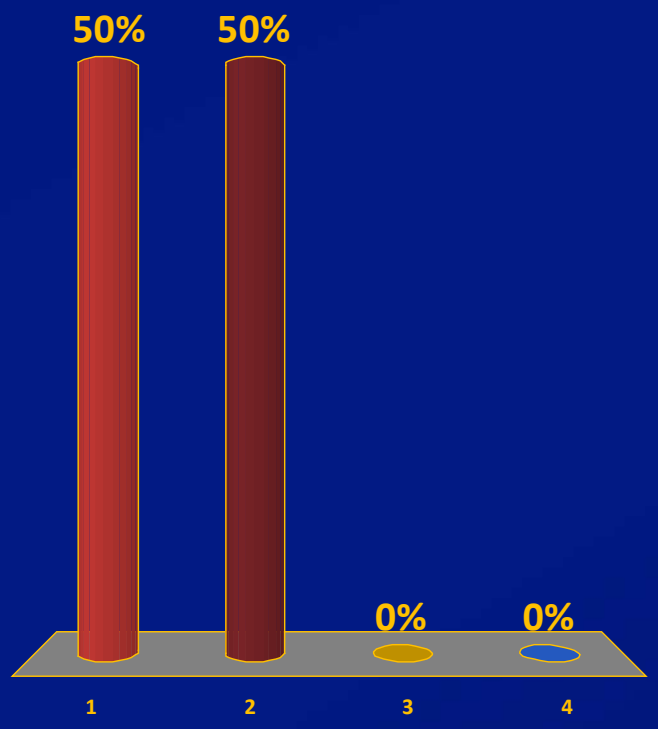


FacWideIN is a ‘virtual’ location within NHSN, which means the user does not define it like other specific units/locations, and it is only used in the Monthly Reporting Plan, Summary Data Reporting Form (denominator), and for Conferring Rights.

Case 11

A positve MRSA blood specimen collected from an inpatient on day 4 of admission would be categorized as:

1. Healthcare Facility-Onset (HO)
2. Community-Onset (CO)
3. Community-Onset Healthcare Facility-Associated (CO-HCFA)
4. It depends on the patient's history



Case 11

#1..Healthcare Facility-Onset (HO)

NHSN Categorizes MRSA Bacteremia LabID Events Based on Date Admitted to Facility and Date Specimen Collected

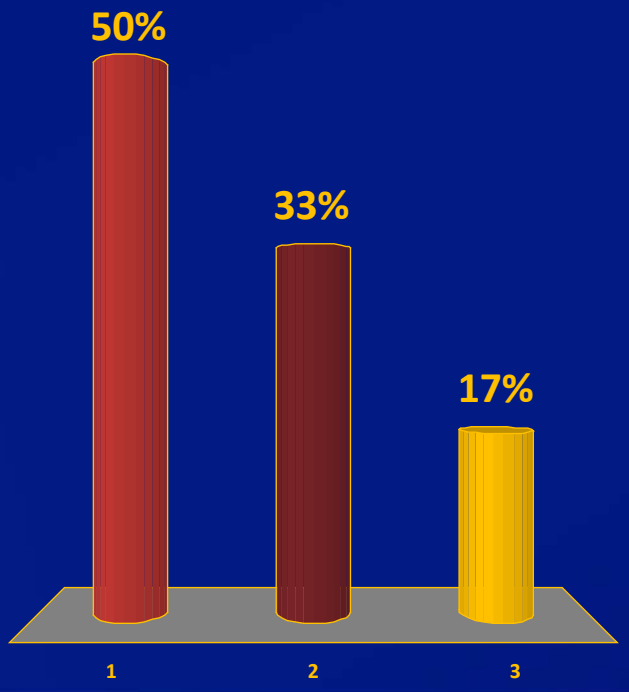
- **Healthcare Facility-Onset (HO): LabID Event collected > 3 days after admission to the facility (i.e., on or after day 4)**

- Community-Onset (CO): LabID Event collected as an outpatient or an inpatient ≤ 3 days after admission to the facility (i.e., days 1, 2, or 3 of admission)

Case 11

What if the patient was symptomatic for sepsis on admission, but the blood culture was not collected until day 4 of admission?

1. I can over-ride NHSN and categorize the event as community-onset.
2. NHSN will categorize as community-onset.
3. ✓ NHSN will categorize as healthcare facility-onset.



Case 11

#3..Healthcare-Onset

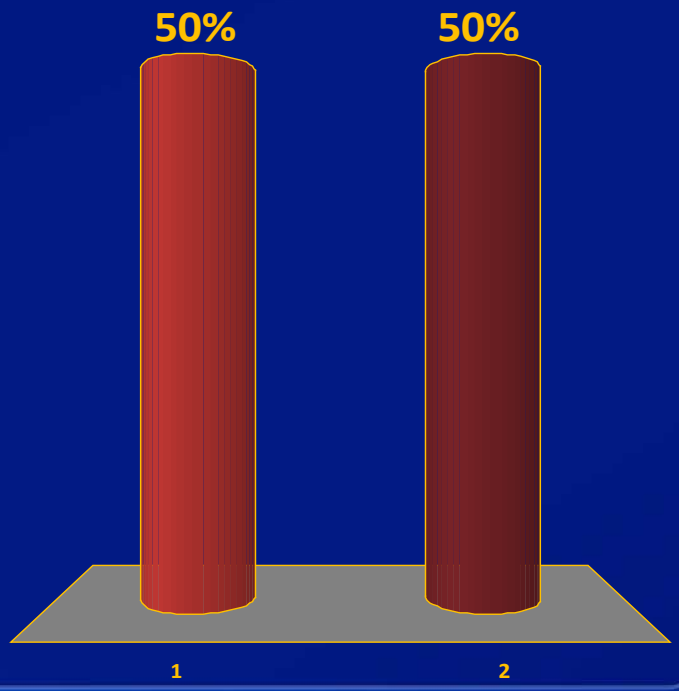
NHSN would still categorize the event as healthcare-onset since the first positive blood specimen was collected on or after day 4 of admission

**Lab ID Event reporting is a proxy measure to lighten the load of surveillance, but this reduction in burden is traded off with a decreased specificity as it relates to true infection and attribution

Case 12

For **FacWideIN** reporting: Should LabID Events be reported to NHSN for patients housed in Observation locations?

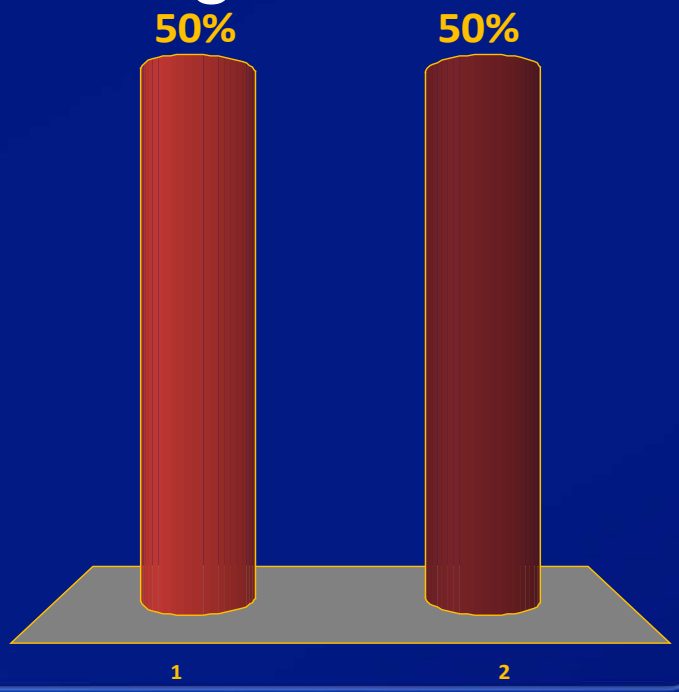
1. YES.
2. NO.



Case 12

Are patients housed in Observation locations included in patient day and admission counts for **FacWideIN** reporting?

1. YES.
2. NO.



Case 12

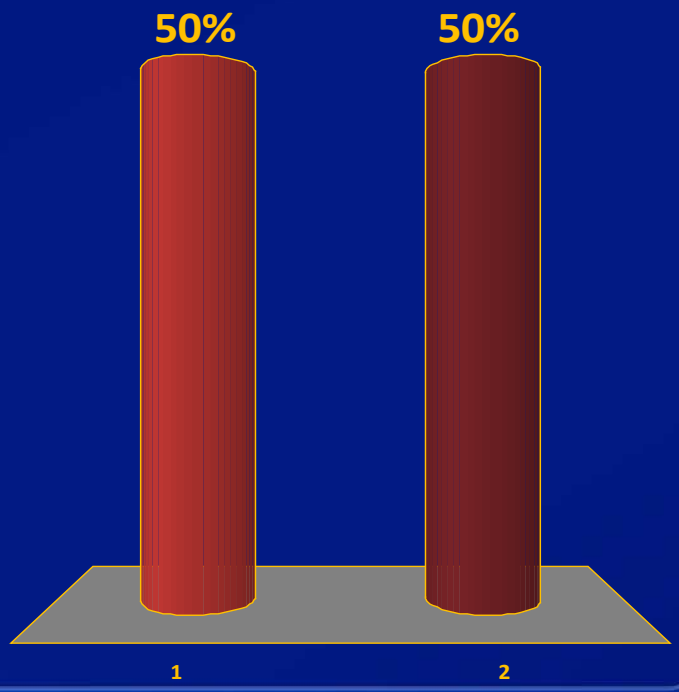
Observation patients in observation locations:

An "**observation" location** (e.g., 24-hour observation area) is considered an **outpatient unit**, so time spent in this type of unit does not ever contribute to any inpatient counts (i.e., patient days, device days, admissions). Admissions to such outpatient units represent "encounters" for the purposes of outpatient surveillance for LabID Event monitoring in the MDRO/CDI module

Case 13-new

Are Observation patients housed in inpatient locations included FacWideIN LabID Event reporting?

1. YES.
2. NO.



Case 13

If an observation patient is sent to an inpatient location for monitoring, the patient should be included for all inpatient and device day counts. The facility assignment of the patient as an observation patient or an inpatient has no bearing in this instance for counting purposes, since the patient is being housed, monitored, and cared for in an inpatient location.

Case 14: **Meet Tim**

Assume all specimens collected are shown

	Pt	Admit Date/ Location	Specimen Collection Date/Loc	Specimen Source	Lab Result	LabID Event? location?	Explanation
1	Tim	6/1/12 ICU	6/1/12 ED	Stool	C. diff + toxin	**YES ICU**	Specimen collection date = admission date
2	Tim	6/1/12 ICU	6/2/12 ICU	Blood	MRSA	**YES ICU**	1st MRSA + Blood in location (ICU)
3	Tim	6/1/12 ICU	6/12/12 ICU	Blood	MRSA	**NO**	≤ 14 days from previous specimen in location
4	Tim	6/1/12 ICU	6/20/12 ICU	Blood	MRSA	**NO**	≤ 14 days from previous specimen in location
5	Tim	6/1/12 ICU	7/10/12 ICU	Blood	MRSA	**YES ICU**	>14 days previous specimen in location
6	Tim	6/1/12 ICU	7/15/12 2 East	Blood	MRSA	**YES 2 East**	NEW location

Case 15
Identify the LabID Events

	Pt	Admit Date/ Location	Specimen Collection Date/Loc	Specimen Source	Lab Result	LabID Event? Location?	Explanation
1	Bill	6/15/12 CCU	6/16/12 CCU	Blood	MRSA	**YES/ CCU**	1st MRSA + blood in location (CCU)
2	Bill	6/15/12 CCU	6/20/12 3-East	Blood	MRSA	**YES 3-East**	NEW location
3	Lily	7/2/12 ICU	7/1/12 ED	Stool	C. diff + toxin	**NO**	Specimen collected **before** admit date
4	Lily	7/2/12 ICU	7/6/12 ICU	Stool	C. diff + toxin	**YES / ICU**	≤ 14days previous spec (inpt location)
5	Lily	7/2/12 ICU	7/10/12 2-West	Stool	C. diff + toxin	**YES / 2-West**	NEW location
6	Joe	6/1/12 ICU	6/6/12 ICU	Stool	C. diff equiv toxin	**NO**	Must be **toxin + +PCR = toxin +**

Assume all specimens collected are shown

Case 16
Identify the LabID Events

	Pt	Admit Date/ Location	Specimen Collection Date/Loc	Specimen Source	Lab Result	LabID Event? Location?	Explanation
1	Jim	8/2/12 CCU	8/2/12 CCU	Blood	MRSA	**YES/CCU**	1st MRSA blood for location
2	Jim	8/2/12 CCU	8/6/12 CCU	Blood	MRSA	**NO**	≤ 14 days previous specimen/location
3	Sam	7/2/12 ICU	7/9/12 ICU	Stool	C. diff +antigen - toxin	**NO**	Must be **toxin +** *****+PCR = toxin +***
4	Tim	7/2/12 NICU	7/6/12 NICU	Stool	C. diff +toxin	**NO**	NICU excluded
5	Paul	8/2/12 M/S	8/5/12 M/S	Blood	MRSA	**YES M/S**	1st MRSA blood for location
6	Paul	8/5/12 ICU	8/5/12 ICU	Blood	MRSA	**YES/ICU**	1st MRSA blood for location

Assume all specimens collected are shown

THANK YOU!